

*Appendix 1*

**STATEMENT OF WORK FOR THE  
STIBNITE MINE REMEDIAL INVESTIGATION / FEASIBILITY STUDY  
Valley County ID near Yellow Pine, ID**

**Purpose**

This Statement of Work (SOW) sets forth the requirements for conducting a Remedial Investigation and Feasibility Study (RI/FS) at the Stibnite Mine Site (Site) located in northwest Idaho approximately 14 miles from Yellow Pine. The purpose of the RI/FS is to investigate the nature and extent of contamination at the Site and to develop and evaluate remedial alternatives, as appropriate. This SOW provides an overview of Work that will be carried out by Midas Gold Corporation (Respondent) as it implements the RI/FS at the Site.

This RI/FS SOW is attached to and is incorporated into the Settlement Agreement and Administrative Order on Consent (AOC) for the Site. Technical work described in this SOW is intended to provide more information to the Respondent for the purpose of implementing the AOC and is not intended to change the meaning of any AOC language. This SOW is also consistent with both the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9601 et seq., and the National Oil and Hazardous Substances Pollution Contingency Plan, commonly called the National Contingency Plan (NCP), 40 CFR 300. The AOC and this SOW are hereafter referred to interchangeably as the “AOC.” Any discrepancies between the AOC and this SOW are unintended, and whenever necessary, the AOC will control any interpretive disputes.

**Scope**

The specific RI/FS activities to be conducted at the Site are set forth in seven separate tasks.

- Task 1 - Scoping
- Task 2 - Community Relations
- Task 3 - Site characterization
- Task 4 - Treatability Studies
- Task 5 - Feasibility Study
- Task 6 - Detailed Analysis of Remedial Alternatives

## **Oversight**

Work conducted under the AOC is intended to satisfy the legal requirements for the RI/FS established under both Section 104(a)(1) of CERCLA and Idaho's Environmental Protection & Health Act, Idaho Code §§ 39-101 to 39-130; the Hazardous Waste Management Act of Idaho, Idaho Code §§ 39-4401 to 39-4432; and Idaho's Water Quality Act, Idaho Code §§ 39-3601 et seq. As such, oversight of the Respondent's Work conducted under the SOW will be carried out by EPA, the USFS, and the IDEQ (the Agencies) in a manner to assure the satisfaction of all federal and state requirements. The Respondent shall support the Agencies' initiation and conduct of activities related to the implementation of oversight activities.

Respondent shall submit all documents or deliverables required as part of this SOW to EPA, for EPA's review and approval. All work products submitted to EPA are subject to EPA approval, including but not limited to, submissions specified in the Work Plan(s) or Settlement Agreement and additional work products that may be required under Work Plan modifications. Respondent shall ensure that all plans, reports, and records are comprehensive, accurate, and consistent in content and format with the NCP and relevant EPA guidance.

Throughout the process of developing the RI/FS, the Respondent shall prepare and submit Quarterly Progress Reports to EPA to aid in project planning. These reports must document the status of all work products under development. These reports shall describe the actions and decisions taken, and problems encountered during the previous quarter, and activities scheduled during the upcoming reporting period. Progress reports shall also summarize the extent to which the procedures and dates set forth in the AOC and the Work Plan are being met. These reports shall be submitted according to the Schedule included as Attachment E.

## **Schedule**

Refer to Attachment E for the primary and potential secondary deliverables and associated schedules.

## **Guidance**

The Respondent shall conduct the RI/FS, and produce technical reports that are in accordance with the AOC, SOW, the Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA (RI/FS Guidance) (U.S. EPA, Office of Emergency and Remedial Response, October 1988), and any other guidance relevant to conducting an RI/FS. A list of the pertinent guidance documents is included at the end on this SOW. Attachments A, B, C, and D include suggested document formats for the Work Plan, Sampling and Analysis Plan, RI Report, and FS Report, respectively. The RI/FS guidance describes the required report contents.

## **Roles and Responsibilities**

The Respondent shall furnish all necessary personnel, materials, and services needed, or incidental to, performing the RI/FS, except as otherwise specified in the AOC. At the

completion of the RI/FS, EPA will be responsible for the selection of a Site remedy and will document this selection in a Record of Decision (ROD).

## **Remedy Requirements**

The remedial action alternative selected by the EPA will meet the cleanup standards specified in Section 121 of CERCLA. That is, the selected remedial action will be protective of human health and the environment, will be in compliance with, or include a waiver of, applicable or relevant and appropriate requirements (ARARs) of other laws, will be cost-effective, will utilize permanent solutions and alternative treatment technologies or resource recovery technologies, to the maximum extent practicable, and will address the statutory preference for treatment as a principal element. The final RI/FS report including the baseline risk assessment (BLRA), as adopted by the EPA, will, with the administrative record, form the basis for the selection of the Site's remedy and will provide the information necessary to support the development of the ROD.

## **TASK 1 - SCOPING**

Scoping is the initial planning process of the RI/FS. Respondent shall document the specific project scope in the RI/FS Work Plan. During the scoping process, the Site-specific objectives of the RI/FS, including the identification of potential preliminary remediation goals (PRGs) will be proposed by the Respondent and approved by EPA. In addition to developing the Site-specific objectives of the RI/FS, Respondent shall define a general project management approach for the Site, which shall be documented by the Respondent in a draft Work Plan. Because the Work required to perform an RI/FS is not fully known at the outset and is phased in accordance with a Site's complexity and the amount of available information, it may be necessary to modify the Work Plan during the RI/FS to satisfy the objectives of the study. When scoping the specific aspects of this project, Respondent shall meet with EPA either in person or telephonically to discuss all project planning decisions and special concerns associated with the Site.

The following activities shall be performed by the Respondent as a function of the project planning process.

### ***a. Site Background***

The Respondent shall gather, analyze, and present existing Site background information and shall conduct a work session to assist in planning the scope of the RI/FS.

#### **Collect and analyze existing data and document the need for additional data**

Before planning RI/FS activities, all existing Site data shall be thoroughly compiled and reviewed by the Respondent. Historical data shall be submitted electronically according to EPA Region 10 specifications. The Respondent shall refer to Table 2-1 of the RI/FS Guidance for a comprehensive list of data collection information sources. Specifically, this must include presently available data relating to the varieties and quantities of hazardous substances at the Site, and past disposal practices. This must also include results from any previous sampling events that

may have been conducted. Only data that is determined by EPA to be of appropriate type and quality to support specific intended uses shall be utilized in the RI/FS. This includes data utilized to develop the BLRA, to identify additional data needs to better characterize the Site, to better define potential applicable or relevant and appropriate requirements (ARARs), and to develop a range of preliminarily identified remedial alternatives. Data Quality Objectives (DQOs) shall be established, subject to EPA's approval, which shall be used to assess the usefulness of existing data and to direct future data gathering efforts. Decisions regarding the necessary data needs and DQOs will be made by EPA.

#### Conduct Site Visit

The Respondent and EPA shall conduct a Site visit during the project scoping phase to assist in developing a conceptual understanding of sources and areas of contamination as well as potential exposure pathways and receptors at the Site. During the Site visit the Respondent shall observe the Site's physiography, hydrology, geology, and demographics, as well as natural resource, ecological, and cultural resources. This information shall be utilized to better scope the project and to determine the extent of additional data necessary to characterize the Site, better define potential ARARs, and assist in identifying potential remedial alternatives.

#### ***b. Project Planning***

Once the Respondent has collected and analyzed existing data and conducted a Site visit, the specific project scope shall be planned. Project planning activities include those tasks described below, as well as identifying data needs, developing a work plan, designing a data collection program, and identifying health and safety protocols. The Respondent shall meet with EPA's Remedial Project Manager (RPM) regarding the following activities and before drafting the scoping deliverables listed below.

#### Preliminary Conceptual Site Model

Information on the waste sources, pathways, receptors, cultural resources, and other information concerning the Site is used to develop a conceptual understanding of the Site which helps to evaluate potential risks to human health and the environment. The Conceptual Site Model (CSM) should include known and suspected sources of contamination, types of contamination and affected media/resources, known and potential routes of migration, and known or potential human and environmental receptors. This effort, in addition to assisting in identification of locations where sampling is necessary, will also assist in the identification of potential remedial technologies. Additional information for evaluating exposure concerns through the use of a CSM is provided in the DQO Guidance. The CSM must be updated as new information becomes available.

The preliminary CSM associated with the ecological risk assessment (ERA) must include species and their habitats that could be impacted by Site-related contamination based on information generated from a historical review and a



cultural resource audit and will show the relationships among species and potential exposure pathways. The Respondent shall provide assistance to the RPM in collecting this information as requested. If information is not provided to the Respondent within the timeframe specified by EPA, the RPM will notify the Respondent in writing either to proceed with the preparation of the RI/FS Work Plan without the information or to delay its submittal pending receipt of the information. The preliminary CSM for the human health risk assessment (HHRA) must identify potential receptor populations and potential exposure pathways.

#### Refine and document preliminary remedial action objectives and alternatives

Once existing Site information has been analyzed and an understanding of the potential Site risks have been determined, the Respondent shall review and, if necessary, refine the Remedial Action Objectives (RAOs) that have been identified by EPA for each actually or potentially contaminated medium. The revised RAOs must be documented in a technical memorandum and subject to EPA's approval. The Respondent shall then identify a preliminary comprehensive range of potential remedial action alternatives and associated technologies. The range of potential alternatives shall encompass, where appropriate, alternatives in which treatment significantly reduces the toxicity, mobility, or volume of the waste; alternatives that involve containment with little or no treatment; and a no-action alternative.

#### Document the need for treatability studies

Respondent shall conduct bench and/or pilot studies as necessary to determine the suitability of various remedial technologies to Site conditions and problems. Technologies that may be suitable to the Site should be identified as early as possible to determine whether there is a need to conduct treatability studies to better estimate costs and performance capabilities. Should treatability studies be determined to be necessary, a testing plan identifying the types and goals of the studies, the level of effort needed, a schedule for completion, and the data management guidelines should be submitted to EPA for review and approval. Upon EPA approval, a test facility and any necessary equipment, vendors, and analytical services will be procured by the contractor.

When the treatability studies are completed, Respondent shall evaluate the results to assess the technologies with respect to the goals identified in the test plan. A report summarizing the testing program and its results shall be prepared by the Respondent and presented in the final RI/FS report. The Respondent shall implement all management and quality control review activities for this task. If remedial actions involving treatment have been identified by the Respondent or EPA, treatability studies shall be required, except where the Respondent can demonstrate to the satisfaction of EPA that they are not needed. Where treatability studies are needed, initial treatability testing activities (such as research and study design) should be planned to occur concurrently with Site characterization activities.

### Begin preliminary identification of potential ARARs

The Respondent shall conduct a preliminary identification of potential ARARs (chemical-specific, location-specific, and action-specific) to assist in the refinement of the RAOs and the initial identification of remedial alternatives. ARAR identification will continue as Site conditions, contaminants, and remedial action alternatives are better defined.

### ***c. Scoping Deliverables***

At the conclusion of the project planning phase, the Respondent shall submit an RI/FS Work Plan, a Sampling and Analysis Plan (SAP) consisting of a Field Sampling Plan (FSP) and Quality Assurance Project Plan (QAPP), and a Site Health and Safety Plan (HASP). These plans must be reviewed and approved by EPA prior to the initiation of field activities.

#### RI/FS Work Plan

A Work Plan documenting the decisions and evaluations completed during the scoping process shall be submitted to the RPM for review and approval. The Work Plan shall be developed in conjunction with the SAP and the Site HASP, although each plan may be delivered under separate cover. The Work Plan shall include a comprehensive description of the work to be performed, including the methodologies to be utilized, as well as a corresponding schedule for completion. In addition, the Work Plan shall include the rationale for performing the required activities. Specifically, the Work Plan must present a statement of the problem(s) and potential problem(s) posed by the Site and the objectives of the RI/FS. Furthermore, the plan must include a Site background summary setting forth the Site description including the geographic location of the Site, and to the extent possible, a description of the Site's physiography, hydrology, hydrogeology, geology, demographics, ecological, cultural, and natural resource features; a synopsis of the Site history and a description of previous responses that have been conducted at the Site by local, state, federal, or private parties; and a summary of the existing data in terms of physical and chemical characteristics of the contaminants identified, and their distribution among the environmental media at the Site. In addition, the plan must include a description of the Respondent's Site management strategy developed during scoping and a preliminary identification of remedial alternatives and data needs for evaluation of remedial alternatives. The plan must reflect coordination with treatability study requirements, if treatability studies are initiated. It must include a process for and manner of identifying potential ARARs (chemical-specific, location-specific, and action-specific).

Finally, the major part of the Work Plan is a detailed description of the tasks to be performed, information needed for each task and for the BLRA, information to be produced during and at the conclusion of each task, and a description of the work products that will be submitted to the RPM. This includes the deliverables set forth in the remainder of this SOW; a schedule for each of the required activities which is consistent with the RI/FS guidance; and a project management plan, including a

data management plan (e.g., requirements for project management systems and software, minimum data requirements, data format and backup data management), monthly reports to the RPM and meetings and presentations to EPA and the Support Agencies at the conclusion of each major phase of the RI/FS. The Respondent must refer to Appendix B of the RI/FS Guidance for a comprehensive description of the contents of the required Work Plan, and a suggested format can be found in Attachment A.

### Sampling and Analysis Plan

The Respondent shall prepare a SAP to ensure that sample collection and analytical activities are conducted in accordance with technically acceptable protocols and that the data meet DQOs. The SAP provides a mechanism for planning field activities and consists of a FSP and a QAPP. A suggested format for the SAP (inclusive of the FSP and QAPP) is provided in Attachment B. The SAP, FSP, and QAPP shall be prepared in accordance with EPA DQO guidance documents (EPA 2000, 2002a, 2002b, and 2006).

The FSP must define in detail the sampling and data-gathering methods that will be used on the project. It must include sampling objectives, sample location and frequency, sampling equipment and procedures, and sample handling and analysis. The QAPP must describe the project objectives and organization, functional activities, and quality assurance and quality control (QA/QC) protocols that will be used to achieve the desired DQOs. The DQOs shall, at a minimum, reflect use of analytic methods to identify contamination and remediate contamination consistent with the levels for remedial action objectives identified in the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), pages 51425-26 and 51433 (December 21, 1988). The QAPP shall be prepared in accordance with requirements in EPA QA/R-5 *EPA Requirements for Quality Assurance Project Plans* (latest draft or revision) and EPA QA/G-5 *EPA Guidance for Quality Assurance Project Plans* (latest draft or revision), EPA QA/G-4HW Data Quality Objectives Process for Hazardous Waste Site Investigations, and EPA QA/G-4 Guidance for the Data Quality Objective Process. All sampling and analyses performed pursuant to this SOW shall conform to EPA direction, approval, and guidance regarding sampling, QA/QC, data validation, and chain-of-custody procedures. In addition, the QAPP must address the following: sampling procedures; sample custody; analytical procedures; data reduction, validation, and reporting; and personnel qualifications.

Field personnel must be trained and conduct work in accordance with EPA and OSHA requirements and guidance. The Respondent shall demonstrate, in advance and to the satisfaction of EPA, that each laboratory they may use is qualified to conduct the proposed work. This includes use of methods and analytical protocols for the chemicals of concern in the media of interest within detection and quantification limits consistent with both QA/QC procedures and DQOs approved in the QAPP for the Site by EPA. The laboratory must have and follow an approved

QA program. If a laboratory not in the Contract Laboratory Program (CLP) is selected, methods consistent with CLP methods that would be used at this Site for the purposes proposed and QA/QC procedures approved by EPA will be used. If the laboratory is not in the CLP program, a laboratory QA program must be submitted for EPA's review and approval. EPA may require that the Respondent submit detailed information to demonstrate that the laboratory is qualified to conduct the work, including information on personnel qualifications, equipment, and material specifications. The Respondent shall provide assurances that EPA has access to laboratory personnel, equipment, and records for sample collection, transportation, and analysis.

### **Potential Target Analytes**

The following list of chemicals include the initial Chemicals of Potential Concern (COPCs). The initial COPC list includes, but is not limited to, the analytes listed below. The Respondent shall review this list for surface water, groundwater, sediments, soils, and vegetation analytes relative to ARARs, preliminary remediation goals (PRGs), screening levels, Site-specific risk assessment data needs, treatability study data needs, feasibility study data needs, and other potential performance standards. All metal analytes (aqueous) shall be analyzed for total and dissolved constituents unless otherwise approved by EPA. Analytes may be added and/or removed from further consideration or monitored at varying frequencies based upon Site-specific factors such as dry or wet year hydrologic cycles as approved or otherwise directed by EPA.

### **Chemicals/Analytes of Potential Concern for Surface Water**

The following COPCs shall be included in the analyses for all surface water sampling stations during the first high flow (spring runoff) and the first low flow (fall) sampling events conducted following signing of the AOC. The spring runoff sampling event shall be conducted as close as possible to the peak of the spring runoff hydrograph. A minimum of two storm event sampling events shall be conducted.

### **Laboratory Analyses**

- Alkalinity
- Aluminum
- Antimony
- Arsenic
- Barium
- Beryllium
- Boron
- Cadmium
- Calcium
- Chloride
- Chromium (III)
- Chromium (VI)

- Cobalt
- Copper
- Hardness
- Iron
- Lead
- Magnesium
- Manganese
- Mercury
- Molybdenum
- Nickel
- Nitrogen, total Kjeldahl
- Phosphorus
- Potassium
- Selenium
- Silver
- Sodium
- Sulphate
- Thallium
- Tungsten
- Total Dissolved Solids
- Total Organic Carbon
- Total Suspended Solids
- Uranium
- Vanadium
- Zinc

#### Field Analyses

- Conductivity
- Dissolved Oxygen
- Flow
- pH
- Temperature

The Respondent shall review the results of the first year's surface water sampling, shall compare the analytical results for each of the COPCs against the screening levels, and shall recommend COPCs to be eliminated from the above list for subsequent surface water sampling events. Upon approval by EPA, the COPCs eliminated by this process do not need to be included in the analyses for subsequent surface water sampling events.

#### **Chemicals/Analytes of Potential Concern for Sediments:**

The following COPCs shall be included in the analyses for all sediment sampling stations:

#### Laboratory Analyses

- Antimony
- Arsenic
- Cadmium
- Chromium
- Copper
- Lead
- Manganese
- Mercury
- Nickel
- Selenium
- Silver
- Tungsten
- Vanadium
- Zinc

**Chemicals/Analytes of Potential Concern for Soils/Waste Rock:**

The following COPCs shall be included in the analyses for all soils/waste rock sampling:

Laboratory Analyses

- Antimony
- Arsenic
- Boron
- Cadmium
- Chromium
- Cobalt
- Copper
- Lead
- Manganese
- Mercury
- Molybdenum
- Nickel
- Selenium
- Silver
- Thallium
- Tungsten
- Uranium
- Vanadium
- Zinc

**Chemicals/Analytes of Potential Concern for Vegetation:**

The following COPCs shall be included in the analyses for all vegetation sampling stations

Laboratory Analyses

- Antimony
- Arsenic
- Boron
- Cadmium
- Chromium
- Cobalt
- Copper
- Lead
- Manganese
- Mercury
- Molybdenum
- Nickel
- Selenium
- Silver
- Thallium
- Tungsten
- Vanadium
- Zinc

**Chemicals/Analytes of Potential Concern for Groundwater**

The COPCs listed below shall be included in the analyses for all groundwater sampling stations and shall be sampled at a minimum during the first high flow (spring runoff) and the first low flow (fall) sampling events conducted following signing of the AOC. The spring runoff sampling event shall be conducted as close as possible to the peak of the spring runoff hydrograph and the low flow sampling shall be conducted at all groundwater sampling stations as close as possible to the low point of the surface water flow hydrograph.

Laboratory Analyses

- Alkalinity
- Aluminum
- Antimony
- Arsenic
- Barium
- Beryllium
- Cadmium
- Calcium
- Chloride
- Chromium III
- Chromium VI
- Cobalt
- Copper
- Hardness

- Iron
- Magnesium
- Manganese
- Mercury
- Molybdenum
- Nickel
- Nitrate/nitrite as N
- Nitrogen (TKN)
- Orthophosphate
- Potassium
- Selenium
- Silver
- Sodium
- Sulfate
- Thallium
- Total Dissolved Solids
- Total Suspended Solids
- Total Organic Carbon
- Tungsten
- Uranium
- Vanadium
- Zinc

#### Field Analyses

- Conductivity
- Dissolved Oxygen or ORP
- Ferric Iron
- Ferrous Iron
- Nitrite
- pH
- Temperature

The Respondent shall review the results of the first year's groundwater sampling, shall compare the analytical results for each of the COPCs against the screening levels, and shall recommend COPCs to be eliminated from the above list for subsequent groundwater sampling events. Upon approval by EPA, the COPCs eliminated by this process do not need to be included in the analyses for subsequent groundwater sampling events.

#### Site Health and Safety Plan

A HASP shall be prepared in conformance with the Respondent's health and safety program, and in compliance with OSHA regulations and protocols. It should be noted that EPA does not "approve" the Respondent's health and safety plan, but



rather EPA reviews it to ensure that all necessary elements are included, and that the plan provides for the protection of human health and the environment.

## **TASK 2 - COMMUNITY RELATIONS**

The development and implementation of community relations activities are the responsibility of EPA. The critical community relations planning steps performed by EPA include conducting community interviews and developing a community relations plan. Although implementation of the community relations plan is the responsibility of EPA, the Respondent may assist by providing information regarding the Site's history, participating in public meetings, and preparing fact sheets for distribution to the general public. In addition, the Respondent shall establish a community information repository, at or near the City of McCall, to house one copy of the administrative record. The extent of community relations activities involvement by potentially responsible parties (PRPs) is left to the discretion of EPA. The Respondent's community relations responsibilities, if any, are specified in the community relations plan. Any PRP-conducted community relations activities will be subject to oversight by EPA.

## **TASK 3 - SITE CHARACTERIZATION**

As part of the RI, the Respondent shall perform the activities described in this task, including the preparation of a Site characterization summary and a RI report. The overall objective of Site characterization is to describe areas of a Site that may pose a threat to human health or the environment. This is accomplished by first determining a Site's physiography, geology, and hydrology/hydrogeology. Surface and subsurface pathways of migration must be defined. The Respondent shall identify the sources of contamination and define the nature, extent, and volume of the sources of contamination, including their physical and chemical constituents as well as their background concentrations at incremental locations in the affected media. The Respondent shall also investigate the extent of migration of this contamination as well as its volume and any changes in its physical or chemical characteristics, to provide for a comprehensive understanding of the nature and extent of contamination at the Site. Using this information, contaminant fate and transport is then determined and projected.

During this phase of the RI/FS, the Work Plan, SAP, and HASP are implemented. Field data are collected and analyzed to provide the information required to accomplish the objectives of the study. The Respondent shall notify the RPM at least two weeks in advance of the field work regarding the planned dates for field activities, including ecological field surveys, field layout of the sampling grid, excavation, installation of wells, initiating sampling, installation and calibration of equipment, pump tests, and initiation of analysis and other field investigation activities. The Respondent shall demonstrate that the laboratory and type of laboratory analyses that will be utilized during Site characterization meet the specific QA/QC requirements and the DQOs of the Site investigation as specified in the SAP. In view of the unknown Site conditions, activities are often iterative, and to satisfy the objectives of the RI/FS, it may be necessary for the Respondent to supplement the work specified in the initial Work Plan. In addition to the deliverables below, the

Respondent shall provide a monthly progress report and participate in weekly meetings or conference calls at major points in the RI/FS.

***a. Field Investigation***

The field investigation shall include the gathering of data to define Site physical and biological characteristics, sources of contamination, and the nature and extent of contamination at the Site. These activities shall be performed by the Respondent in accordance with the Work Plan and SAP. At a minimum, this shall address the following:

Implement and document field support activities

The Respondent shall initiate field support activities following approval of the Work Plan and SAP. Field support activities may include obtaining access to the Site, scheduling, and procuring equipment, office space, laboratory services, and/or contractors. The Respondent shall notify the RPM at least two weeks prior to initiating field support activities so that EPA may adequately schedule oversight tasks. The Respondent shall also notify the RPM upon completion of field support activities.

Investigate and define site physical and biological characteristics

The Respondent shall collect data on the physical and biological characteristics of the Site and its surrounding areas, including the physiography, geology, and hydrology, and specific physical characteristics identified in the work plan. This information must be ascertained through a combination of physical measurements, observations, and sampling efforts, and will be utilized to define potential transport pathways and human, cultural, and ecological receptor populations. In defining the Site's physical characteristics, the Respondent shall also obtain sufficient engineering data (such as the effects of contaminated media weathering and ground and surface water contaminant loading) to aid in the projection of contaminant fate and transport, and the development and screening of remedial action alternatives, including information to assess treatment technologies.

Define sources of contamination

The Respondent shall locate each source of contamination and define the areal extent and depth of contamination associated with each source in all media. The physical characteristics and chemical constituents and their concentrations must be determined for all known and discovered sources of contamination. The Respondent shall conduct sufficient sampling to define the boundaries of the contaminant sources consistent with the QAPP and DQOs.

Defining the source of contamination must include analyzing the potential for contaminant release (e.g., long term leaching from soil), contaminant mobility and persistence over time, and characteristics important for evaluating remedial actions, including information to assess treatment technologies.

### Describe the nature and extent of contamination

The Respondent shall gather information to describe the nature and extent of contamination as a final step during the field investigation. To describe the nature and extent of contamination, the Respondent must utilize the information and site physical and biological characteristics and sources of contamination to give a preliminary estimate of the contaminants that may have migrated. The Respondent shall then implement an iterative monitoring program and any study program identified in the work plan or SAP such that by using analytical techniques sufficient to detect and quantify the concentration of contaminants, the migration of contaminants through the various media at the Site can be determined. In addition, the Respondent shall gather data for calculations of contaminant fate and transport. This process must be continued until the area and depth of contamination are known. This information will be used to determine the level of risk presented by the Site and to help develop appropriate remedial action alternatives for evaluation.

## ***b. Data Analyses***

### Evaluate Site characteristics

The Respondent shall analyze and evaluate the data to describe: (1) Site physical and biological characteristics; (2) contaminant source characteristics; (3) nature and extent of contamination; and (4) contaminant fate and transport. Results of the Site physical characteristics, source characteristics, and extent of contamination analyses are utilized in the analysis of contaminant fate and transport. The evaluation must include the actual and potential magnitude of releases from the sources, and horizontal and vertical spread of contamination as well as mobility and persistence of contaminants. Where modeling is appropriate, such models shall be identified to EPA in a technical memorandum prior to their use. All data and programming, including any proprietary programs, shall be made available to EPA together with a sensitivity analysis. The RI data shall be presented in a format (i.e., computer disc or equivalent) to facilitate the preparation of the BLRA. The validated data, along with QA/QC information and data validation summaries, shall be submitted in electronic format within 90 calendar days from the date of collection of the last sample from each sampling event. The Respondent shall then collect any data required to address data gaps identified by EPA as needed to complete the BLRA. This evaluation shall also provide information relevant to Site characteristics necessary to evaluate the need for remedial action in the BLRA and to aid in the development and evaluation of remedial alternatives. Analyses of data collected for Site characterization must meet the DQOs developed in the QA/QC plan stated in the SAP (or as revised during the RI).

## ***c. Data Management Procedures***

The Respondent shall consistently document the quality and validity of field and laboratory data compiled during the RI.

#### Document field activities

Information gathered during Site characterization shall be consistently documented and adequately recorded by the Respondent in well-maintained field logs and laboratory reports. The method(s) of documentation must be specified in the work plan and/or the SAP. Field logs must be utilized to document observations, measurements, and significant events that have occurred during field activities. Laboratory reports must document sample custody, analytical responsibility, analytical results, adherence to prescribed protocols, nonconformity events, corrective measures, and/or data deficiencies.

#### Maintain sample management and tracking

The Respondent shall maintain field reports, sample shipment records, analytical results, and QA/QC reports to ensure that only validated analytical data are reported and utilized in the development and evaluation of remedial alternatives. Analytical results developed under the Work Plan must not be included in any Site characterization reports unless accompanied by or cross-referenced to a corresponding QA/QC report. In addition, the Respondent shall establish a data security system to safeguard chain-of-custody forms and other project records to prevent loss, damage, or alteration of project documentation.

#### Data Validation Management

All validated data shall be made available to EPA in electronic format. The validated data, along with QA/QC information and data validation summaries, shall be submitted in electronic format within 90 calendar days from the date of collection of the last sample from each sampling event. Field and validated analytical data results for all media sampled shall be submitted to EPA by uploading the data to the Water Quality Exchange (WQX) using the Central Data Exchange (CDX). Field and laboratory samples must include information on the sampling locations which will also be submitted to WQX via CDX. (See [www.epa.gov/storet/wqx.html](http://www.epa.gov/storet/wqx.html))

#### ***d. Site Characterization Deliverables***

The Respondent shall prepare the preliminary Site characterization summary and the RI report.

#### Data Summary Reports

After completing each annual field season's sampling and analysis (i.e., at the end of the field season each calendar year), the Respondent shall prepare a concise Site characterization Data Summary Report (DSR). This report must review the investigative activities that have taken place and describe and display Site data documenting the location and characteristics of surface and subsurface features and contamination at the Site, including the affected media, locations, types, physical state, concentrations of contaminants and quantities. In addition, reports shall document the location, dimensions, physical condition and varying concentrations of each contaminant for each source and the extent of contaminant migration

through each of the affected media. Each DSR must also evaluate data gaps and identify additional and/or modified sampling and analysis that shall be included in modifications to the SAP for each subsequent field season. If acceptable to EPA, the DSR following the final field season of data collection can be eliminated as a separate deliverable, and the information collected during the final field season can be presented in the RI report.

#### Remedial Investigation Report (RI)

The Respondent shall prepare and submit a draft RI report to the RPM for review and approval. This report shall summarize results of field activities to characterize the Site, sources of contamination, nature and extent of contamination, and the fate and transport of contaminants. The Respondent shall refer to the RI/FS Guidance for an outline of the report format and contents, and a suggested format for the RI report can be found in Attachment C. Following comment by EPA, the Respondent shall prepare a final RI report satisfactorily addressing the comments.

#### Baseline Risk Assessment (BLRA)

The Respondent shall conduct a BLRA to assess the potential human health, and environmental risks posed by the Site in the absence of any remedial action. This effort will involve four components: contaminant identification, exposure assessment, toxicity assessment, and risk characterization.

**Contaminant Identification** – The Respondent shall review available information on all hazardous substances present at the Site and identify the major contaminants of concern. Contaminants of concern should be selected based on their intrinsic toxicological properties because they are present in large quantities, and/or because they are currently in, or potentially may migrate into, critical exposure pathways (e.g., drinking water).

**Exposure Assessment** – The Respondent shall identify actual or potential exposure pathways, characterize potentially exposed populations, and evaluate the actual or potential extent of exposure.

**Toxicity Assessment** – The Respondent shall provide a toxicity assessment of those chemicals found to be of concern during Site investigation activities. This will involve an assessment of the types of adverse health or environmental effects associated with chemical exposures, the relationship between magnitude of exposures and adverse effects, and the related uncertainties for contaminant toxicity, (e.g., weight of evidence for a chemical's carcinogenicity).

**Risk Characterization** – The Respondent shall integrate information developed during the exposure and toxicity assessments to characterize the current or potential risk to human health and/or the environment posed by the Site. This characterization should identify the potential for adverse health or environmental effects for the chemicals of concern and identify any uncertainties associated with contaminant(s), toxicity(ies), and /or exposure assumptions.

## **TASK 4 - TREATABILITY STUDIES**

If potential remedial actions involving treatment have been identified by Respondent or EPA, Respondent shall conduct treatability studies except where Respondent can demonstrate to the satisfaction of EPA that they are not needed. The following activities shall be performed by the Respondent to support all treatability studies.

### ***a. Determination of Candidate Technologies and of Need for Testing***

The Respondent shall identify in a technical memorandum, subject to EPA review and approval, candidate technologies for a treatability studies program during project planning (Task 1). The listing of candidate technologies must cover the range of technologies required for the development and analysis of alternatives (Task 5 and 6). The specific data requirements for the testing program will be determined and refined during site characterization and the development and screening of remedial alternatives (Tasks 3, 5, and 6).

#### Conduct literature survey and determine the need for treatability testing

The Respondent shall conduct a literature survey to gather information of performance, relative costs, applicability, removal efficiencies, operation and maintenance (O&M) requirements, and implementability of candidate technologies. If practical candidate technologies have not been sufficiently demonstrated or cannot be adequately evaluated for this Site based on available information, treatability testing must be conducted. Where it is determined by EPA that treatability testing is required, and unless the Respondent can demonstrate to EPA's satisfaction that it is not needed, the Respondent shall submit a SOW to the RPM outlining the steps and data necessary to evaluate and initiate the treatability testing program.

#### Evaluation of treatability studies

Once a decision has been made to perform treatability studies, the Respondent and EPA will decide the types of treatability testing to utilize (e.g., bench and/or pilot). Because of the time required to design, fabricate, and install pilot scale equipment as well as perform testing for various operating conditions, the decision to perform pilot testing should be made as early in the process as possible to minimize potential delays of the FS. To assure that a treatability testing program is completed on time, and with accurate results, the Respondent shall either submit to the RPM a treatability testing work plan or an amendment to the original Site work plan for EPA's review and approval.

### ***b. Treatability Testing and Deliverables***

The deliverables that are required, in addition to the memorandum identifying candidate technologies, where treatability testing is conducted, include a work plan, a sampling and analysis plan, and a final treatability evaluation report. EPA may also require a treatability study health and safety plan, where appropriate.

#### Treatability testing work plan

The Respondent shall prepare a treatability testing work plan or amendment to the original Site Work Plan for EPA's review and approval, describing the Site background, remedial technology(ies) to be tested, test objectives, experimental procedures, treatability conditions to be tested, measurements of performance, analytical methods, data management and analysis, health and safety, and residual waste management. The DQOs for treatability testing must be documented as well. If pilot scale treatability testing is to be performed, the pilot scale work plan will describe pilot plant installation and start-up, pilot plant operation and maintenance procedures, operating conditions to be tested, a sampling plan to determine pilot plant performance, and a detailed health and safety plan. If testing is to be performed off-site, permitting requirements must be addressed.

#### Treatability study SAP

If the original QAPP or FSP does not address activities to be performed during the treatability tests, a separate treatability study SAP or amendment to the original Site SAP must be prepared by the Respondent for EPA's review and approval. Task 1, Item c. of this statement of work provides additional information on the requirements of the SAP.

#### Treatability study HASP

If the original HASP is not adequate for defining the activities to be performed during the treatment tests, a separate or amended HASP must be developed by the Respondent. Task 1, Item c, of this SOW provides additional information on the requirements of the health and safety plan. EPA does not "approve" the treatability study HASP.

#### Treatability study evaluation report

Following completion of treatability testing, the Respondent shall analyze and interpret the testing results in a technical report to EPA. Depending on the sequence of activities, this report may be a part of the RI/FS report or a separate deliverable. The report must evaluate each technology's effectiveness, implementability, cost, and actual results as compared with predicted results. The report must also evaluate full scale application of the technology, including a sensitivity analysis identifying the key parameters affecting full-scale operation.

### **TASK 5 - FEASIBILITY STUDY**

The Feasibility Study is comprised of two primary activities: (1) the development and screening of alternatives, and (2) the detailed analysis of alternatives. The alternatives surviving the screening process will be subject to the detailed analysis process. The FS Report must document the results of these two components of FS. Interim deliverables associated with these activities will be identified in the RI/FS Work Plan. The RI and FS are interactive and will be conducted concurrently, to the extent practicable, in a manner that allows information and data collected during the RI to influence the development of

remedial alternatives during the FS, which in turn affect additional information and data needs and the scope of any necessary treatability studies and risk assessments.

***a. Remedial Alternative Development***

The Respondent shall develop and evaluate a range of appropriate waste management options that, at a minimum, will remediate or control any contaminated media (soil, surface water, ground water, sediments) remaining at the Site, as deemed necessary in the RI to ensure protection of human health and the environment and comply with ARARs, concurrent with the RI site characterization task.

A range of remedial alternatives must be developed to identify and provide a variety of waste management options which then can be evaluated. This range of alternatives must include, as appropriate, options in which treatment is used to reduce the toxicity, mobility, or volume of wastes, but which varies in the types of treatment, the amount treated, and the manner in which long-term residuals or untreated wastes are managed. Options involving containment with little or no treatment must be included, as well as options involving both treatment and containment, and a no-action alternative. The following activities shall be performed by the Respondent during the development of remedial alternatives.

Refine and document remedial action objectives

Based on the BLRA, the Respondent shall review, and if necessary, modify the Site-specific remedial action objectives (RAOs) and the list of applicable preliminary remediation goals (PRGs). The modified PRGs shall be documented in a technical memorandum that will be reviewed and approved by EPA. These modified PRGs must specify the contaminants and media of interest, exposure pathways and receptors, and an acceptable contaminant level or range of levels (at particular locations for each exposure route).

Develop general response actions

The Respondent shall develop a range of general response actions for each medium of interest addressing containment, treatment, excavation, pumping, or any other actions, singly or in combination, that may be utilized to satisfy the remedial action objectives for the Site.

Identify areas or volumes of media

The Respondent shall identify volumes and/or areas of media to which general response actions might be applied, taking into account the requirements for protectiveness as identified in the RAOs and the chemical and physical characterization of the Site.

Identify, screen, and document remedial technologies

The Respondent shall identify and evaluate potential remedial technologies applicable to each general response action. The Respondent shall identify various



alternatives for implementing each remedial technology. These alternatives must be evaluated and screened based upon their effectiveness, implementability, and cost factors. Generally, this screening is only necessary when there are many feasible alternatives available for detailed analysis. If necessary, the screening of alternatives shall be conducted to assure that only the alternatives with the most favorable composite evaluation of all factors are retained for further analysis. As appropriate, the screening must preserve the range of treatment and containment alternatives that was initially developed insuring that the alternatives will meet RAOs, ARARs and all other identified performance standards. The range of remaining alternatives must include options that use treatment technologies and permanent solutions to the maximum extent practicable. The Respondent shall prepare a technical memorandum summarizing the results and reasoning employed in screening and arraying alternatives that remain after screening. In addition, a description of the remedial technology alternatives which were eliminated from further consideration as well as the reasons for eliminating the alternatives must be included in the memorandum.

#### Assemble and document alternatives

The Respondent shall assemble selected representative technologies into a range of alternatives for each affected medium or operable unit. Together, all of the alternatives will represent treatment and containment combinations that will address either all of the Site or operable units. A summary of the assembled alternatives and their related action-specific ARARs must be prepared for EPA by the Respondent for inclusion in a technical memorandum.

### **TASK 6 - DETAILED ANALYSIS OF REMEDIAL ALTERNATIVES**

The detailed analysis of alternatives shall be conducted by the Respondent to provide EPA with the information needed to allow for the selection of a Site remedy. This analysis is the final task to be performed by the Respondent during the FS.

#### ***a. Detailed Analysis of Alternatives***

The Respondent shall conduct a detailed analysis of alternatives which must consist of an analysis of each option against a set of nine evaluation criteria and a comparative analysis of all options using the same evaluation criteria as a basis for comparison. EPA has developed the nine evaluation criteria to address the statutory requirements and preferences of CERCLA

#### Apply nine criteria and document analysis

The Respondent shall apply nine evaluation criteria to the assembled remedial alternatives to ensure that the selected remedial alternative will be protective of human health and the environment; will be in compliance with, or include a waiver of, ARARs; will be cost-effective; will utilize permanent solutions and alternative treatment technologies, or resource recovery technologies, to the maximum extent practicable; and will address the statutory preference for treatment as a principal element. The evaluation criteria include: (1) overall protection of human health

and the environment; (2) compliance with ARARs; (3) long-term effectiveness and permanence; (4) reduction of toxicity, mobility, or volume; (5) short-term effectiveness; (6) implementability; (7) costs; (8) state (or support agency) acceptance; and (9) community acceptance. (Note: Criteria 8 and 9 are considered after the RI/FS report has been released to the general public). For each alternative, the Respondent must provide: (1) a description of the alternative that outlines the waste management strategy involved and identifies the key ARARs associated with each alternative; and (2) a discussion of the individual criterion assessment.

**Compare alternatives against each other and document the comparison of alternatives**

The Respondent shall perform a comparative analysis between the remedial alternatives. That is, each alternative must be compared against the others using the evaluation criteria as a basis of comparison. Identification and selection of the preferred alternative are reserved by EPA. The Respondent shall prepare a technical memorandum summarizing the results of the comparative analysis.

***b. Detailed Analysis Deliverables***

In addition to the technical memorandum summarizing the results of the comparative analysis, the Respondent shall submit a draft FS report to the RPM for review and approval. Once EPA's comments have been addressed by the Respondent to the satisfaction of EPA, the final FS report may be bound with the final RI report.

**Feasibility Study report**

The Respondent shall submit a draft FS report for EPA and the Support Agencies' review and comment. This report, as ultimately adopted or amended by EPA, provides a basis for remedy selection by EPA, and documents the development and analysis of remedial alternatives. The Respondent shall refer to the RI/FS Guidance for an outline of the report format and the required report content, and a suggested format for the report can be found in Attachment D. The Respondent shall prepare a final FS report which satisfactorily addresses the comments.

## REFERENCES FOR CITATION

The following list, although not comprehensive, comprises many of the regulations and guidance documents that apply to the RI/FS process.

The (revised) National Oil and Hazardous Substance Pollution Contingency Plan (NCP).

"Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA", U.S. EPA, Office of Emergency and Remedial Response, October 1988, OSWER Directive No. 9355.3-01.

"Guidance on Oversight of Potentially Responsible Party Remedial Investigations and Feasibility Studies", U.S. EPA, Office of Waste Programs Enforcement, OSWER Directive No. 9835.3.

"Interim Guidance on Potentially Responsible Party Participation in Remedial Investigation and Feasibility Studies", U.S. EPA, Office of Waste Programs Enforcement, Appendix A to OSWER Directive No. 9355.3-01.

"A Compendium of Superfund Field Operations Methods", Two Volumes, U.S. EPA, Office of Emergency and Remedial Response, EPA/540/P-87/001a, August 1987, OSWER Directive No. 9355.0-14.

U.S. EPA, NEIC Policies and Procedures Manual", May 1978, revised November 1984, EPA -330/9-78-991-R.

"Data Quality Objectives for Remedial Response Activities", U.S. EPA, Office of Emergency and Remedial Response and Office of Waste Programs Enforcement, EPA/540/G-87/003, March 1987, OSWER Directive No. 9335.0-7B.

"Guidelines and Specifications for the Lead Agency(ies) Quality Assurance Project Plans", U.S. EPA, Office of Research and Development, Cincinnati, Ohio, QAMS-004/80, December 29, 1980.

"QA/R-5 *EPA Requirements for Quality Assurance Project Plans* (latest draft or revision) and EPA QA/G-5 *EPA Guidance for Quality Assurance Project Plans* (latest draft or revision), EPA QA/G-4HW Data Quality Objectives Process for Hazardous Waste Site Studies, and EPA QA/G-4 Guidance for the Data Quality Objective Process"

"Interim Guidelines and Specifications for the Lead Agency(ies) Quality Assurance Project Plans", U.S. EPA, Office of Emergency and Remedial Response, QAMS-005/80, December 1980.

"Users Guide to the Lead Agency(ies) Contract Laboratory Program", U.S. EPA, Sample Management Office, August 1982.

"Interim Guidance on Compliance with Applicable or Relevant and Appropriate Requirements", U.S. EPA, Office of Emergency and Remedial Response, July 9, 1987, OSWER Directive No. 9234.0-05.

"CERCLA Compliance with Other Laws Manual", Two Volumes, U.S. EPA, Office of Emergency and Remedial Response, August 1988 (draft), OSWER Directive No. 9234.1-01 and -02.

"Guidance on Remedial Actions for Contaminated Groundwater at Superfund Sites", U.S. EPA, Office of Emergency and Remedial Response, (draft), OSWER Directive No. 9283.1-2.

"Draft Guidance on the Lead Agency(ies) Superfund Decision Documents", U.S. EPA, Office of Emergency and Remedial Response, March 1988, OSWER Directive No. 9355.3-02.

"Risk Assessment Guidance for Superfund--Volume I, Human Health Evaluation Manual (Part A)", December 1989, EPA/540/1-89/002.

"Risk Assessment Guidance for Superfund--Volume II Environmental Evaluation Manual", March 1989, EPA /540/1-89/001.

"Guidance for Data Usability in Risk Assessment", October 1990, EPA /540/G-90/008.

"Performance of Risk Assessments in Remedial Investigation/ Feasibility Studies (RI/FSs) Conducted by Potentially Responsible Parties (PRPs)", August 28, 1990, OSWER Directive No. 9835.15.

"Role of the Baseline Risk Assessment in Superfund Remedy Selection Decisions", April 22, 1991, OSWER Directive No. 9355.0-30.

"Health and Safety Requirements of Employees Employed in Field Activities", U.S. EPA, Office of Emergency and Remedial Response, July 12, 1981, EPA Order No. 1440.2.

OSHA Regulations in 29 CFR 1910.120 (Federal Register 45654, December 19, 1986).

"Interim guidance on Administrative Records for Selection of CERCLA Response Actions", U.S. EPA, Office of Waste Programs Enforcement, March 1, 1989, OSWER Directive No. 9833.3A.

"Community Relations in Superfund: A Handbook", U.S. EPA, Office of Emergency and Remedial Response, June 1988, OSWER Directive No. 9320.0-03B.

"Community Relations During Enforcement Activities and Development of the Administrative Record", U.S. EPA, Office of Waste Programs Enforcement, November 1988, OSWER Directive No. 9836.0-1A.

## ***Attachments***

### ***Attachment A***

#### ***Suggested RI/FS Work Plan Format***

##### Executive Summary

1. Introduction
2. Site Background and Setting
3. Initial Evaluation
  - Types and volumes of waste present
  - Potential pathways of contaminant migration/preliminary public health and environmental impacts
  - Preliminary identification of operable units
  - Preliminary identification of response objectives and remedial action alternatives
4. Work Plan Rationale
  - DQO needs
  - Work Plan approach
5. RI/FS Tasks
6. Cost and Key Assumptions
7. Schedule
8. Project Management
  - Staffing
  - Coordination
9. References

##### Appendices

## ***Attachment B***

### ***Suggested Format for SAP (FSP and QAPP)***

#### **FSP**

1. Site Background
2. Sampling Objectives
3. Sample Location and Frequency
4. Sample Designation
5. Sampling Equipment and Procedures
6. Sample Handling and Analysis

#### **QAPP**

Title Page

Table of Contents

1. Project Description
2. Project Organization and Responsibilities
3. QA Objectives for Measurement
4. Sampling Procedures
5. Sample Custody
6. Calibration Procedures
7. Analytical Procedures
8. Data Reduction, Validation, and Reporting
9. Internal Quality Control
10. Performance and Systems Audits
11. Preventative Maintenance
12. Data Assessment Procedures

13. Corrective Actions

14. Quality Assurance Reports

## ***Attachment C***

### ***Suggested RI Report Format***

#### Executive Summary

##### 1. Introduction

- 1.1 Purpose of Report
- 1.2 Site Background
  - 1.2.1 Site Description
  - 1.2.2 Site History
  - 1.2.3 Previous Investigations
- 1.3 Report Organization

##### 2. Study Area Investigation

- 2.1 Includes field activities associated with site characterization. These may include physical and chemical monitoring of some, but not necessarily all, of the following:
  - 2.1.1 Surface Features (topographic mapping, etc.) (natural and manmade features)
  - 2.1.2 Contaminant Source Investigations
  - 2.1.3 Meteorological Investigations
  - 2.1.4 Surface-Water and Sediment Investigations
  - 2.1.5 Geological Investigations
  - 2.1.6 Soil and Vadose Zone Investigations
  - 2.1.7 Ground-Water Investigations
  - 2.1.8 Human Population Surveys
  - 2.1.9 Ecological Investigations
- 2.2 If technical memoranda documenting field activities were prepared, they may be included in an appendix and summarized in this report chapter.

##### 3. Physical Characteristics of the Study Area

- 3.1 Includes results of field activities to determine physical characteristics. These may include some, but not necessarily all, of the following:
  - 3.1.1 Surface Features
  - 3.1.2 Meteorology
  - 3.1.3 Surface-Water Hydrology
  - 3.1.4 Geology
  - 3.1.5 Soils
  - 3.1.6 Hydrogeology
  - 3.1.7 Demography and Land Use
  - 3.1.8 Ecology

##### 4. Nature and Extent of Contamination

- 4.1 Presents the results of Site characterization, both natural and chemical components and contaminants in some, but not necessarily all, of the following media:



- 4.1.1 Sources (lagoons, sludges, tanks, etc.)
- 4.1.2 Soils and Vadose Zone
- 4.1.3 Ground Water
- 4.1.4 Surface Water and Sediments
- 4.1.5 Air

## 5. Contaminant Fate and Transport

- 5.1 Potential Routes of Migration (i.e., air, groundwater, etc.)
- 5.2 Contaminant Persistence
  - 5.2.1 If they are applicable (i.e., for organic contaminants), describe estimated persistence in the study area environment and physical, chemical, and/or biological factors of importance for the media of interest.
- 5.3 Contaminant Migration
  - 5.3.1 Discuss factors affecting contaminant migration for the media of important (e.g., sorption onto soils, solubility in water, movement of ground water, etc.)
  - 5.3.2 Discuss modeling methods and results, if applicable.

## 6. Baseline Risk Assessment

- 6.1 Human Health Evaluation
  - 6.1.1 Exposure Assessment
  - 6.1.2 Toxicity Assessment
  - 6.1.3 Risk Characterization
- 6.2 Environmental Evaluation

## 7. Summary and Conclusions

- 7.1 Summary
  - 7.1.1 Nature and Extent of Contamination
  - 7.1.2 Fate and Transport
  - 7.1.3 Risk Assessment
- 7.2 Conclusions
  - 7.2.1 Data Limitations and Recommendations for Future Work
  - 7.2.2 Recommended Remedial Action Objectives

## Appendices

- A. Technical Memorandum on Field Activities (if available)
- B. Analytical Data and QA/QC Evaluation Results
- C. Risk Assessment Methods

## ***Attachment D***

### ***Suggested Format for Feasibility Study Report***

#### Executive Summary

#### 1. Introduction

##### 1.1 Purpose and Organization Report

##### 1.2 Background Information (Summarized from RI Report)

###### 1.2.1 Site Description

###### 1.2.2 Site History

###### 1.2.3 Nature and Extent of Contamination

###### 1.2.4 Contaminant Fate and Transport

###### 1.2.5 Baseline Risk Assessment

#### 2. Identification and Screening of Technologies

##### 2.1 Introduction

2.2 Remedial Action Objectives – Presents the development of remedial action objectives for each medium of interest (i.e., ground water, soil, surface water, air, etc.) For each medium, the following should be discussed:

Contaminants of interest

Allowable exposure based on risk assessment (including ARARs)

Development of remediation goals

2.3 General Response Actions – For each medium of interest, describes the estimation of areas or volumes to which treatment, containment, or exposure technologies may be applied.

2.4 Identification and Screening of Technology Types and Process Options – For each medium of interest, describe:

2.4.1 Identification and Screening of Technologies

2.4.2 Evaluation of Technologies and Selection of Representative Technologies

#### 3. Development and Screening of Alternatives

3.1 Development of Alternatives – Describes rationale for combination of technologies/media into alternatives. Note: This discussion may be by medium or for the Site as a whole.

##### 3.2 Screening of Alternatives (if conducted)

###### 3.2.1 Introduction

###### 3.2.2 Alternative 1

###### 3.2.2.1 Description

###### 3.2.2.2 Evaluation

###### 3.2.2 Alternative 2

###### 3.2.2.1 Description

###### 3.2.2.2 Evaluation

###### 3.2.3 Alternative 3

###### 3.2.3.1 Description

###### 3.2.3.2 Evaluation

- 4. Detailed Analysis of Alternatives
  - 4.1 Introduction
  - 4.2 Individual Analysis of Alternatives
    - 4.2.1 Alternative 1
      - 4.2.1.1 Description
      - 4.2.1.2 Evaluation
    - 4.2.2 Alternative 2
      - 4.2.2.1 Description
      - 4.2.2.2 Evaluation
    - 4.2.3 Alternative 3
      - 4.2.3.1 Description
      - 4.2.3.2 Evaluation
  - 4.3 Comparative Analysis

## ***Attachment E***

### ***Stibnite Mine Remedial Investigation and Feasibility Study (RI/FS) Statement of Work (SOW) Schedule***

#### RI/FS Work Plan/Sampling and Analysis Plan (WP/SAP):

- Draft due within 120 days after the Effective Date of the Settlement Agreement/CO.
- Final Work Plan due within 90 days of receipt of consolidated Agency comments.

#### Data Summary Reports (DSRs):

- Draft DSRs due within 120 days completion of each season's field work or within 90 days of the receipt of final laboratory data, whichever is earlier. Within 5 days of the completion of each season's field work, Respondent shall provide written notification to EPA identifying the completion date. Within 5 days of the receipt of final laboratory data for the preceding field season, Respondent shall provide written notification to EPA identifying the receipt date of final laboratory data.
- Final DSRs due within 30 days of receipt of consolidated Agency comments.

#### Remedial Investigation Report (RI):

- Submit draft RI within 120 days after receipt of laboratory data from the final field season. Within 5 days of receipt of final laboratory data, Respondent shall provide written notification to EPA identifying receipt date of final laboratory data.
- Final RI due within 60 days of receipt of consolidated Agency comments.

#### Baseline Risk Assessment Report (BLRA):

- Submit draft BLRA within 60 days after submittal of Final RI.
- Final BLRA due within 60 days of receipt of consolidated Agency comments.

#### Feasibility Study (FS):

- Submit draft FS within 120 days after submittal of BLRA Report.
- Final FS due within 90 days of receipt of consolidated Agency comments.

#### Data Validation Summaries (DVSs):

- DVSs due within 120 days from the date of collection of the last sample from each sampling event. Within 5 days of the completion of each season's field work, Respondent shall provide written notification to EPA identifying the date of collection of the last sample from each sampling event.

### Interim Deliverables

- Draft Interim Deliverables (i.e., Technical Memoranda for Treatability Studies Preliminary Remedial Goals, Remedial Action Objectives, etc.) as identified in the SOW, or as required by EPA, shall be due within 30 days receipt of notice by Respondent that said Deliverable is required.
- Final Interim Deliverables due within 60 days of receipt of consolidated Agency comments.

### Quarterly Progress Reports

- Quarterly Progress Reports shall be due 15 days after the end of the previous calendar quarter.

<sup>1</sup>Documents may initially be released as “draft final” pending final resolution of issues



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

SEP 29 2016

OFFICE OF  
ENFORCEMENT AND  
COMPLIANCE ASSURANCE

**MEMORANDUM**

**SUBJECT:** Issuance of Revised Model Consent Order and New Model Unilateral Order for Remedial Investigation/Feasibility Study and Updated Financial Assurance and Insurance Language for All CERCLA Response Action Settlements and Unilateral Administrative Orders

**FROM:** Cynthia L. Mackey, Director  
Office of Site Remediation Enforcement

A handwritten signature in dark ink, appearing to read "Cynthia L. Mackey", is written over the printed name and title of the sender.

**TO:** Regional Counsels, Regions I-X  
Superfund National Policy Managers, Regions I-X

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**I. INTRODUCTION**

This memorandum transmits the revised Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) *Model Administrative Settlement Agreement and Order on Consent for Remedial Investigation/Feasibility Study* (RI/FS ASAO) and the new CERCLA *Model Unilateral Administrative Order for Remedial Investigation/Feasibility Study* (RI/FS UAO). These models were developed in collaboration with Headquarters, Regional, and Department of Justice (DOJ) staff. These documents are now available from the RI/FS category on the Cleanup Enforcement Model Language and Sample Documents Database ("Cleanup Models Database") located at <https://cfpub.epa.gov/compliance/models/>.

These models are effective today and supersede the *Revised Model Administrative Order on Consent for Remedial Investigation and Feasibility Study* (Jan. 21, 2004) ("2004 RI/FS AOC") and the RI/FS administrative settlement agreement and order on consent elements of the *Interim Revisions to CERCLA Removal, RI/FS and RD AOC Models to Clarify Contribution Rights and Protection Under Section 113(f)* (Aug. 3, 2005).

As explained further in Section II below, we are also using these two models to introduce several changes to the financial assurance and insurance provisions of all of our CERCLA response action settlement and unilateral administrative order models.

## II. RI/FS ASAOOC

The RI/FS ASAOOC contains myriad revisions, including a substantial restructuring of the 2004 RI/FS AOC. These revisions are generally designed to bring the RI/FS ASAOOC into conformance with more recently issued CERCLA guidance and models, including the *Revised Model Administrative Settlement Agreement and Order on Consent for Removal Actions* (“Removal ASAOOC”).<sup>1</sup> In addition, the RI/FS ASAOOC incorporates revised model settlement language announced in September 2014 as applicable to all CERCLA models (i.e., immediately effective covenants not to sue and contribution protection and rights language updates).<sup>2</sup> It also incorporates the model geospatial data and electronic submission of deliverables language announced in September 2014.<sup>3</sup> Further, the RI/FS ASAOOC contains a number of conforming changes to the *Model Remedial Design/Remedial Action Consent Decree* (RD/RA CD) and *Model Remedial Design/Remedial Action Statement of Work* (RD/RA SOW),<sup>4</sup> adapted to the RI/FS context, including updated: property requirements (covering site access and applicable use restrictions); access to information; record retention; financial assurance; past and future response costs payment provisions; force majeure; and the consolidated waiver of claims covering de micromis, municipal solid waste, and *de minimis*/ability to pay parties. It also contains revised technical assistance plan language<sup>5</sup> and a new community involvement provision for use in accordance with applicable EPA guidance and the National Contingency Plan.

### Financial Assurance Language

The RI/FS ASAOOC introduces some new financial assurance (FA) language that we are also adding to our other CERCLA administrative and judicial response action models at this time. First, we amended the introductory note in Section XXVIII (Financial Assurance) to reference the April 6, 2015 FA guidance.<sup>6</sup> More importantly, we clarified the requirements of the financial test and corporate guarantee mechanisms by stating them in the model language itself (see Paragraphs 111-112) rather than by referencing the Resource Conservation and Recovery Act (RCRA) FA regulations. Inclusion of the requirements in the model is helpful because the RCRA

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<sup>1</sup> The latest version of the Removal ASAOOC is available online at [https://cfpub.epa.gov/compliance/models/view.cfm?model\\_ID=754](https://cfpub.epa.gov/compliance/models/view.cfm?model_ID=754).

<sup>2</sup> See *Revisions to 2009 ARC Memo and Issuance of Revised CERCLA Past Cost, Peripheral, De Minimis, De Micromis, and Municipal Solid Waste Settlement Models* (Sept. 26, 2014), available at <http://www2.epa.gov/enforcement/guidance-revisions-2009-arc-memo-and-issuance-cercla-payment-models>.

<sup>3</sup> See *Transmittal of Model Geospatial Data and Electronic Submission of Deliverables Language for Inclusion in CERCLA Statements of Work* (Sept. 29, 2014), available at <http://www2.epa.gov/enforcement/guidance-model-geospatial-data-language-use-cercla-sows>.

<sup>4</sup> The latest version of the RD/RA CD and RD/RA SOW are available on the Cleanup Models Database at [https://cfpub.epa.gov/compliance/models/view.cfm?model\\_ID=81](https://cfpub.epa.gov/compliance/models/view.cfm?model_ID=81) (RD/RA CD) and [https://cfpub.epa.gov/compliance/models/view.cfm?model\\_ID=543](https://cfpub.epa.gov/compliance/models/view.cfm?model_ID=543) (RD/RA SOW).

<sup>5</sup> See *Interim Guidance: Providing Communities with Opportunities for Independent Technical Assistance in Superfund Settlements* (Sept. 3, 2009), available at <https://www.epa.gov/enforcement/interim-guidance-opportunities-independent-technical-assistance-superfund-settlements>, and *Transmittal of Updated Superfund Response and Settlement Approach for Sites Using the Superfund Alternative Approach (SAA Guidance)* (Sept. 28, 2012), OSWER Directive No. 9200.2-125, available at <https://www.epa.gov/sites/production/files/documents/rev-saa-2012-mem.pdf>.

<sup>6</sup> See *Guidance on Financial Assurance in Superfund Settlement Agreements and Unilateral Administrative Orders*, available at <https://www.epa.gov/enforcement/guidance-financial-assurance-superfund-settlements-and-orders>.

FA regulations are only partially applicable to the CERCLA settlement context. Further, the FA language has been streamlined to clearly provide the elements that need to be met for each FA mechanism.

### **Insurance Language**

Additionally, in response to Regional request, Section XXVII of the RI/FS ASAOC introduces some new insurance language that we are also adding to our other CERCLA administrative and judicial response action models at this time. Specifically, we are modifying the first paragraph of the insurance provision to include suggested minimum coverage amounts for several types of insurance policies based on input from OSRE's Insurance Team, and we are adding a new sentence to the end of that paragraph requiring Respondents to include identifying information with their insurance submittals.

No later than \_\_\_ days before commencing any on-site Work, Respondents shall secure, and shall maintain until the first anniversary after issuance of Notice of Completion of Work pursuant to Section XXX (Notice of Completion of Work), commercial general liability insurance with limits of \$\_\_\_ million, ~~for any one occurrence, and automobile insurance with limits of \$\_\_\_ million, combined single limit, liability of \$1 million per occurrence, automobile liability insurance with limits of liability of \$1 million per accident, and umbrella liability insurance with limits of liability of \$5 million in excess of the required commercial general liability and automobile liability limits,~~ naming the EPA as an additional insured with respect to all liability arising out of the activities performed by or on behalf of Respondents pursuant to this Settlement. . . . Respondents shall ensure that all submittals to EPA under this Paragraph identify the [Site name, City, State] and the EPA docket number for this action.

### **Stipulated Penalties Language**

Finally, the RI/FS ASAOC introduces some minor clarifications to the stipulated penalties section that we are also adding to our other CERCLA administrative and judicial response action settlement models at this time. First, we simplified, but did not substantively change, the definition of “comply” in Paragraph 75. Second, we clarified the two stipulated penalty “amount” categories addressed by Paragraphs 76-77. Prior to the change, Paragraph 76 covered “Work (including Payments)” and Paragraph 77 covered “Reports.” This division was confusing because reports are a type of Work, and some reports are significant deliverables and some reports are more minor. Revised Paragraph 76 now covers “Payments, Financial Assurance, Major Deliverables, and Other Milestones,” and revised Paragraph 77 now covers “Other Deliverables.”

## **III. RI/FS UAO**

The RI/FS UAO is a new model that we are issuing as a result of our increased use of and greater experience with UAOs in the RI/FS context. The UAO mirrors the ASAOC with the exception of provisions that apply only to the negotiated agreement context. The UAO-specific provisions are



modeled after the recently issued *Model Unilateral Administrative Order for Removal Actions* (“Removal UAO”) and *Model Unilateral Administrative Order for Remedial Design/Remedial Action* (“RD/RA UAO”).<sup>7</sup> Consistent with these previously-issued UAOs, the RI/FS UAO contains the Financial Assurance and Enforcement/Work Takeover model language issued for UAOs in 2015,<sup>8</sup> as amended by the changes to the FA language described in Section II above. Recognizing that the UAO FA section may not always be practical or needed in smaller RI/FS actions, the FA section is presented as optional language in the UAO model. However, Regions are encouraged to include the FA section, especially for larger RI/FS actions, to ensure completion of the work.

### **Property Requirements and Privileged and Protected Claims**

The RI/FS UAO introduces two other minor changes that we are also making to the Removal UAO and RD/RA UAO:

1. In the Property Requirements section (Section XIV of the RI/FS UAO), we are not including the following paragraph (and we are removing it from the other two UAOs) because we believe that institutional controls that may be selected by a future decision document are better addressed by a future UAO or UAO amendment or by some other future enforcement tool:

If EPA determines in a decision document prepared in accordance with the NCP that institutional controls in the form of state or local laws, regulations, ordinances, zoning restrictions, or other governmental controls or notices are needed, Respondents shall cooperate with EPA’s [and the State’s] efforts to secure and ensure compliance with such institutional controls.

2. In the Privileged and Protected Claims paragraph of the Access to Information section (Section XV, Paragraph 53.b of the RI/FS UAO), we are modifying the third sentence as follows to better fit the UAO context, as there is no dispute resolution provision in a UAO:

Respondents shall retain all Records that they claim to be privileged or protected until EPA [and the State] has [have] had a reasonable opportunity to dispute the ~~privilege or protection claim and any such dispute has been resolved in~~

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<sup>7</sup> These models are available on the Cleanup Models Database at [https://cfpub.epa.gov/compliance/models/view.cfm?model\\_ID=755](https://cfpub.epa.gov/compliance/models/view.cfm?model_ID=755) (Removal UAO) and [https://cfpub.epa.gov/compliance/models/view.cfm?model\\_ID=752](https://cfpub.epa.gov/compliance/models/view.cfm?model_ID=752) (RD/RA UAO).

<sup>8</sup> See *Model Unilateral Administrative Order for [RD/RA, RI/FS, or Removal Action]* April 2015 [Financial Assurance and Enforcement/Work Takeover Sections Only], <https://www.epa.gov/sites/production/files/2015-04/documents/fa-provision-fa-work-2015.pdf>, issued as an attachment to *Issuance of CERCLA Financial Assurance Guidance, Updated and New Sample Mechanisms, and Model Language Provisions for Unilateral Administrative Orders* (Apr. 6, 2016), <https://www.epa.gov/enforcement/guidance-financial-assurance-superfund-settlements-and-orders>. The sample FA mechanisms for use in connection with CERCLA settlement agreements and UAOs issued with the FA Guidance are available in Word format from the Financial Assurance category of our Cleanup Models Database at <https://cfpub.epa.gov/compliance/models/>.

Respondents' favor or a court determines that such Record is privileged or protected.

#### **IV. CONTACTS**

Please direct any questions about the RI/FS ASAOC to Greg Wall of OSRE's Regional Support Division (RSD) at 202-564-4498 (wall.gregory@epa.gov) and any questions about the RI/FS UAO to Doug Dixon of RSD at 202-564-4232 (dixon.douglas@epa.gov).

#### **V. DISCLAIMER**

This memorandum and the documents referenced herein are intended as guidance for EPA employees. They are not rules and do not create any legal obligation. The extent to which EPA applies them in a particular case will depend on the facts of the case.

#### **Attachments**

cc: John Michaud, Associate General Counsel, OGC/SWERLO  
James Woolford, Director, OLEM/OSRTI  
Tom Mariani, Chief, Environmental Enforcement Section, DOJ  
Superfund Regional Counsel Branch Chiefs

UNITED STATES  
ENVIRONMENTAL PROTECTION AGENCY  
REGION \_\_\_\_

IN THE MATTER OF:	)	
	)	
[Site Name and Location]	)	CERCLA Docket No. ____
	)	
[Names of Respondents (if many, reference attached list)],	)	
	)	
Respondents	)	<b>ADMINISTRATIVE SETTLEMENT</b>
	)	<b>AGREEMENT AND ORDER ON</b>
Proceeding Under Sections 104, 107	)	<b>CONSENT FOR REMEDIAL</b>
and 122 of the Comprehensive	)	<b>INVESTIGATION/FEASIBILITY</b>
Environmental Response, Compensation,	)	<b>STUDY</b>
and Liability Act, 42 U.S.C. §§ 9604,	)	
9607 and 9622.	)	
	)	

**MODEL ADMINISTRATIVE SETTLEMENT AGREEMENT  
AND ORDER ON CONSENT FOR  
REMEDIAL INVESTIGATION / FEASIBILITY STUDY**

September 2016

**[NOTE: This model is designed for settlements involving performance of remedial investigations and feasibility studies under the Interim Final Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA” (OSWER Directive # 9355.3-01, October 1988).]**

This document contains automatic section and paragraph numbers and automatic section and paragraph cross references, and an automated Table of Contents. If you add or delete sections or paragraphs, please do not attempt to manually renumber any sections or paragraphs or cross references. Please see instructions at the end for more details.

This model and any internal procedures adopted for its implementation and use are intended solely as guidance for employees of the U.S. Environmental Protection Agency. They do not constitute rulemaking by the Agency and may not be relied upon to create a right or benefit, substantive or procedural, enforceable at law or in equity, by any person. The Agency may take action at variance with this model or its internal implementing procedures.

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**[NOTE: Appendices may also be listed in this Table of Contents.]**

## **I. JURISDICTION AND GENERAL PROVISIONS**

1. This Administrative Settlement Agreement and Order on Consent ("Settlement") is entered into voluntarily by the United States Environmental Protection Agency (EPA) and **[insert names or attach list of Respondents]** ("Respondents"). This Settlement provides for the performance of a remedial investigation and feasibility study (RI/FS) **[insert if applicable: for the operable unit(s) consisting of (description of operable unit(s))** by Respondents and the payment of certain response costs incurred by the United States at or in connection with the **[insert name]** Site (the "Site") generally located at **[insert address or descriptive location of Site]** in **[City or Town, County, State]**.

2. This Settlement is issued under the authority vested in the President of the United States by Sections 104, 107, and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. §§ 9604, 9607 and 9622 (CERCLA). This authority was delegated to the Administrator of EPA on January 23, 1987, by Executive Order 12580, 52 Fed. Reg. 2923 (Jan. 29, 1987), and further delegated to Regional Administrators by EPA Delegation Nos. 14-14-C (Administrative Actions Through Consent Orders, Apr. 15, 1994) and 14-14-D (Cost Recovery Non-Judicial Agreements and Administrative Consent Orders, May 11, 1994). **[Insert if applicable: These authorities were further redelegated by the Regional Administrator of EPA Region \_\_\_\_ to the \_\_\_\_\_ (insert title of manager to whom delegation is made) by (insert the numerical designation and date of regional delegation).]**

3. EPA and Respondents recognize that this Settlement has been negotiated in good faith and that the actions undertaken by Respondents in accordance with this Settlement do not constitute an admission of any liability. Respondents do not admit, and retain the right to controvert in any subsequent proceedings other than proceedings to implement or enforce this Settlement, the validity of the findings of facts, conclusions of law, and determinations in Section IV (Findings of Fact) and V (Conclusions of Law and Determinations) of this Settlement. Respondents agree to comply with and be bound by the terms of this Settlement and further agree that they will not contest the basis or validity of this Settlement or its terms.

## **II. PARTIES BOUND**

4. This Settlement is binding upon EPA and upon Respondents and their [heirs,] successors and assigns. Any change in ownership or corporate status of a Respondent including, but not limited to, any transfer of assets or real or personal property shall not alter such Respondent's responsibilities under this Settlement.

5. Respondents are jointly and severally liable for carrying out all activities required by this Settlement. In the event of the insolvency or other failure of any one or more Respondents to implement the requirements of this Settlement, the remaining Respondents shall complete all such requirements.

6. Each undersigned representative of Respondents certifies that he or she is fully authorized to enter into the terms and conditions of this Settlement and to execute and legally bind Respondents to this Settlement.

7. Respondents shall provide a copy of this Settlement to each contractor hired to perform the Work required by this Settlement and to each person representing any Respondents with respect to the Site or the Work, and shall condition all contracts entered into under this Settlement upon performance of the Work in conformity with the terms of this Settlement. Respondents or their contractors shall provide written notice of the Settlement to all subcontractors hired to perform any portion of the Work required by this Settlement. Respondents shall nonetheless be responsible for ensuring that their contractors and subcontractors perform the Work in accordance with the terms of this Settlement.

### **III. DEFINITIONS**

**[NOTE: The following list of definitions may be reduced or expanded as appropriate.]**

8. Unless otherwise expressly provided in this Settlement, terms used in this Settlement that are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Settlement or its attached appendices, the following definitions shall apply:

**[NOTE: In the definition below, it is generally sufficient to describe the property using the street address or the tax parcel ID number, but you also may use the legal property description. Legal property descriptions can be lengthy. It is common in conveyance documents to include the legal property description in an attachment. If using a legal property description, it should be the kind found in a deed.]**

“Affected Property” shall mean all real property at the Site and any other real property where EPA determines, at any time, that access, land, water, or other resource use restrictions are needed to implement the RI/FS, including, but not limited to, the following properties **[insert property descriptions]**.

“CERCLA” shall mean the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§9601-9675.

“Day” or “day” shall mean a calendar day. In computing any period of time under this Settlement, where the last day would fall on a Saturday, Sunday, or federal or State holiday, the period shall run until the close of business of the next working day.

“Effective Date” shall mean the effective date of this Settlement as provided in Section XXXV.

“Engineering Controls” shall mean constructed containment barriers or systems that control one or more of the following: downward migration, infiltration, or seepage of surface runoff or rain; or natural leaching migration of contaminants through the subsurface over time. Examples include caps, engineered bottom barriers, immobilization processes, and vertical barriers.

“EPA” shall mean the United States Environmental Protection Agency and its successor departments, agencies, or instrumentalities.

“EPA Hazardous Substance Superfund” shall mean the Hazardous Substance Superfund established by the Internal Revenue Code, 26 U.S.C. §9507.

[“\_\_\_\_\_” shall mean the **[insert name of State pollution control agency or environmental protection agency]** and any successor departments or agencies of the State.]

“Future Response Costs” shall mean all costs, including, but not limited to, direct and indirect costs, that the United States incurs in reviewing or developing deliverables submitted pursuant to this Settlement, in overseeing implementation of the Work, or otherwise implementing, overseeing, or enforcing this Settlement, including but not limited to, payroll costs, contractor costs, travel costs, laboratory costs, the costs incurred pursuant to Section XI (Property Requirements) (including, but not limited to, cost of attorney time and any monies paid to secure or enforce access **[if applicable:** or land, water, or other resource use restrictions], including, but not limited to, the amount of just compensation), Section XV (Emergency Response and Notification of Releases), Paragraph 89 (Work Takeover), **[if Financial Assurance included:** Paragraph 114 (Access to Financial Assurance)], **[if Paragraph 27.c included:** Paragraph 27.c (Community Involvement Plan) **[if paragraph 27.c not included:** community involvement] **[use in all cases:** (including, but not limited to, the costs of any technical assistance grant under Section 117(e) of CERCLA, 42 U.S.C. § 9617(e)], Section XVIII (Dispute Resolution), and all litigation costs. Future Response Costs shall also include Agency for Toxic Substances and Disease Registry (ATSDR) costs regarding the Site **[if Past Response Costs are being paid under the Settlement, also insert:** all Interim Response Costs, and all Interest on those Past Response Costs Respondents have agreed to pay under this Settlement that has accrued pursuant to 42 U.S.C. § 9607(a) during the period from **[insert date identified in Past Response Costs definition]** to the Effective Date].

“Institutional Controls” or “ICs” shall mean Proprietary Controls and state or local laws, regulations, ordinances, zoning restrictions, or other governmental controls or notices that: (a) limit land, water, or other resource use to minimize the potential for human exposure to Waste Material at or in connection with the Site; (b) limit land, water, or other resource use to implement, ensure non-interference with, or ensure the protectiveness of the response action pursuant to this Settlement; and/or (c) provide information intended to modify or guide human behavior at or in connection with the Site.

“Interest” shall mean interest at the rate specified for interest on investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded annually on October 1 of each year, in accordance with 42 U.S.C. § 9607(a). The applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year. Rates are available online at <https://www.epa.gov/superfund/superfund-interest-rates>.

[“**[Site name]** Special Account” shall mean the special account within the EPA Hazardous Substance Superfund, established for the Site by EPA pursuant to Section 122(b)(3) of CERCLA, 42 U.S.C. § 9622(b)(3), and **[identify prior settlement under which EPA established the special account]**.]

**[NOTE: Insert the following definition if Past Response Costs are being paid under the Settlement.]**

["Interim Response Costs" shall mean all costs, including but not limited to direct and indirect costs, (a) paid by the United States in connection with the Site between **[insert date identified in Past Response Costs definition]** and the Effective Date, or (b) incurred prior to the Effective Date, but paid after that date.]

**[NOTE: If including Paragraph 95.a(2) (MSW Waiver), insert the following definition.]**

["Municipal Solid Waste" or "MSW" shall mean waste material: (a) generated by a household (including a single or multifamily residence); or (b) generated by a commercial, industrial or institutional entity, to the extent that the waste material (1) is essentially the same as waste normally generated by a household; (2) is collected and disposed of with other municipal solid waste as part of normal municipal solid waste collection services; and (3) contains a relative quantity of hazardous substances no greater than the relative quantity of hazardous substances contained in waste material generated by a typical single-family household.]

"National Contingency Plan" or "NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, and any amendments thereto.

**[NOTE: Include next definition if any "Affected Property" is owned or controlled by persons other than any Respondent.]**

["Non-Settling Owner" shall mean any person, other than a Respondent, that owns or controls any Affected Property, including **[insert names]**. The clause "Non-Settling Owner's Affected Property" means Affected Property owned or controlled by Non-Settling Owner.]

**[NOTE: Include next definition if any "Affected Property" is owned or controlled by any Respondent.]**

["Owner Respondent" shall mean any Respondent that owns or controls any Affected Property, including **[insert names]**. The clause "Owner Respondent's Affected Property" means Affected Property owned or controlled by Owner Respondent.]

"Paragraph" shall mean a portion of this Settlement identified by an Arabic numeral or an upper or lower case letter.

"Parties" shall mean EPA and Respondents.

**[NOTE: Insert the following definition if Past Response Costs are being paid under the Settlement.]**



["Past Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the United States paid at or in connection with the Site through **[insert date of most recent cost summary]**, plus Interest on all such costs through such date.]

"Proprietary Controls" shall mean easements or covenants running with the land that (a) limit land, water, or other resource use and/or provide access rights and (b) are created pursuant to common law or statutory law by an instrument that is recorded in the appropriate land records office.

"RCRA" shall mean the Solid Waste Disposal Act, 42 U.S.C. §§ 6901-6992 (also known as the Resource Conservation and Recovery Act).

"Respondents" shall mean **[insert names of Respondents]** **[insert if applicable: those Parties identified in Appendix \_\_\_\_]**.

"Section" shall mean a portion of this Settlement identified by a Roman numeral.

"Settlement" shall mean this Administrative Settlement Agreement and Order on Consent and all appendices attached hereto (listed in Section XXXIII (Integration/Appendices)). In the event of conflict between this Settlement and any appendix, this Settlement shall control.

"Site" shall mean the \_\_\_\_\_ Superfund Site, encompassing approximately \_\_\_\_ acres, located at **[insert address or description of location]** in **[city]**, \_\_\_\_\_ County, **[state]** **[insert if applicable: , and depicted generally on the map attached as Appendix \_\_\_\_]**.

"State" [or "Commonwealth"] shall mean the State [or Commonwealth] of \_\_\_\_\_.

"Statement of Work" or "SOW" shall mean the document describing the activities Respondents must perform to develop the RI/FS for **[insert "the Site" or "Operable Unit(s) \_\_\_\_ for the Site"]**, as set forth in Appendix \_\_\_\_ to this Settlement. The Statement of Work is incorporated into this Settlement and is an enforceable part of this Settlement as are any modifications made thereto in accordance with this Settlement.

"Transfer" shall mean to sell, assign, convey, lease, mortgage, or grant a security interest in, or where used as a noun, a sale, assignment, conveyance, or other disposition of any interest by operation of law or otherwise.

**[NOTE: Substitute the following definition of "Tribe" for the definition of "State" if the Site is entirely on tribal land. Add a definition for "Tribe" in addition to the definition of "State" if both have a role at or interest in the Site. Additional changes will be needed throughout the Settlement to either add and/or substitute the Tribe for the State.]**

["Tribe" shall mean the \_\_\_\_\_ Tribe.]

"United States" shall mean the United States of America and each department, agency, and instrumentality of the United States, including EPA.

“Waste Material” shall mean (a) any “hazardous substance” under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (b) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); (c) any “solid waste” under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27); and (d) any [“hazardous material”] under **[insert appropriate State statutory citation and “hazardous material” terminology]**.

“Work” shall mean all activities and obligations Respondents are required to perform under this Settlement, except those required by Section XIII (Record Retention).

#### IV. FINDINGS OF FACT

**[NOTE: Because Findings of Fact are site-specific, no specific model language is provided. However, suggested topics are provided below for some findings. Facts should be presented concisely, accurately, and logically. Findings of fact should clearly support each conclusion of law. Regions should include a discussion of the following points: identification of Respondents; site location and description; site history and operations; site ownership; enforcement history; general categories of Respondents’ liability; past EPA and/or State activities and investigations; and conditions and data showing hazardous substances are present and releases or threats of releases exist.]**

9. [Identification of the Site by name, location, and description (including characteristics of the Site and a description of the surrounding areas, e.g., commercial/industrial/residential area, nearest public supply wells, nearby water bodies, potentially sensitive ecological areas).]

10. [A brief history of the Site including Site ownership and operations (process or other activity producing waste, nature of wastes produced).]

11. [Information that there are hazardous substances at the Site by listing specific chemicals found at the Site, and their locations, concentrations, and quantities where known.]

12. [Description of actual and/or potential release (i.e., leaking drums, contaminated soils, etc.) and contaminant migration pathways, and possible or known routes of exposure, making clear that these are not exclusive.]

13. [Identification of the populations at risk, both human and non-human.]

14. [Health/environmental effects of some major contaminants.]

15. [Whether the Site is on the [proposed] National Priorities List. Sample language follows:

“The \_\_\_\_\_ Site was [listed on] [proposed for inclusion on] the National Priorities List (NPL) by EPA pursuant to CERCLA § 105, 42 U.S.C. § 9605, on **[insert month, day, year]**, **[insert Federal Register citation]**.”]

16. [Identification of Respondents, i.e., name/business; legal status (i.e., corporation, partnership, sole proprietor, trust, individual, federal, state or local government, etc.), general

categories of Respondents' liability under CERCLA § 107(a) and connection with the Site, e.g., owner or operator of hazardous waste site, including years of ownership or operation, or person who arranged for disposal or treatment of, or transporter of hazardous substances found at the Site.]

17. [Identification of prior response and enforcement actions, including investigations and assessments, if any, taken at the Site, by EPA or the State.]

**[NOTE: If the Settlement compromises a claim for response costs,<sup>1</sup> but Attorney General approval is not required because the total response costs are not expected to exceed \$500,000, excluding interest, insert a finding of fact stating:** The Regional Administrator of EPA Region \_\_\_\_, or [his/her] delegatee, has determined that the total past and projected response costs of the United States at or in connection with the Site will not exceed \$500,000, excluding interest.]

## **V. CONCLUSIONS OF LAW AND DETERMINATIONS**

18. Based on the Findings of Fact set forth above, and the administrative record, EPA has determined that:

a. The **[insert name]** Site is a “facility” as defined by Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

b. The contamination found at the Site, as identified in the Findings of Fact above, includes [a] “hazardous substances” as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

c. Each Respondent is a “person” as defined by Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).

d. Each Respondent is a responsible party under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a). **[Regions should specify each category of liability under Section 107. For example:**

(1) Respondents **[insert names]** are the “owner(s)” and/or “operator(s)” of the facility, as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of Section 107(a)(1) of CERCLA, 42 U.S.C. § 9607(a)(1).

(2) Respondents **[insert names]** were the “owners” and/or “operators” of the facility at the time of disposal of hazardous substances at the facility, as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of Section 107(a)(2) of CERCLA, 42 U.S.C. § 9607(a)(2).

(3) Respondents **[insert names]** arranged for disposal or treatment, or arranged with a transporter for transport for disposal or treatment of hazardous

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<sup>1</sup> Note that CERCLA § 104(a)(1) requires that potentially responsible parties must agree to pay oversight costs.

substances at the facility, within the meaning of Section 107(a)(3) of CERCLA, 42 U.S.C. § 9607(a)(3).

(4) Respondents **[insert names]** accept or accepted hazardous substances for transport to the facility within the meaning of Section 107(a)(4) of CERCLA, 42 U.S.C. § 9607(a)(4).]

e. The conditions described in [Paragraphs \_\_\_ of] the Findings of Fact above constitute an actual and/or threatened “release” of a hazardous substance from the facility as defined by Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).

f. The actions required by this Settlement are necessary to protect the public health, welfare, or the environment, are in the public interest, 42 U.S.C. § 9622(a), are consistent with CERCLA and the NCP, 42 U.S.C. §§ 9604(a)(1), 9622(a), and will expedite effective remedial action and minimize litigation, 42 U.S.C. § 9622(a).

g. EPA has determined that Respondents are qualified to conduct the RI/FS within the meaning of Section 104(a) of CERCLA, 42 U.S.C. § 9604(a), and will carry out the Work properly and promptly, in accordance with Sections 104(a) and 122(a) of CERCLA, 42 U.S.C. §§ 9604(a) and 9622(a), if Respondents comply with the terms of this Settlement.

## **VI. SETTLEMENT AGREEMENT AND ORDER**

19. Based upon the Findings of Fact, Conclusions of Law and Determinations set forth above, and the administrative record, it is hereby Ordered and Agreed that Respondents shall comply with all provisions of this Settlement, including, but not limited to, all appendices to this Settlement and all documents incorporated by reference into this Settlement.

## **VII. DESIGNATION OF CONTRACTORS AND PROJECT COORDINATORS**

20. **Selection of Contractors, Personnel.** All Work performed under this Settlement shall be under the direction and supervision of qualified personnel. Within 30 days after the Effective Date, and before the Work outlined below begins, Respondents shall notify EPA in writing of the names, titles, addresses, telephone numbers, email addresses, and qualifications of the personnel, including contractors, subcontractors, consultants, and laboratories to be used in carrying out such Work. If, after the commencement of Work, Respondents retain additional contractors or subcontractors, Respondents shall notify EPA of the names, titles, contact information, and qualifications of such contractors or subcontractors retained to perform the Work at least \_\_\_ days prior to commencement of Work by such additional contractors or subcontractors. EPA retains the right, at any time, to disapprove of any or all of the contractors and/or subcontractors retained by Respondents. If EPA disapproves of a selected contractor or subcontractor, Respondents shall retain a different contractor or subcontractor and shall notify EPA of that contractor’s or subcontractor’s name, title, contact information, and qualifications within \_\_\_ days after EPA’s disapproval. With respect to any proposed contractor, Respondents shall demonstrate that the proposed contractor demonstrates compliance with ASQ/ANSI E4:2014 “Quality management systems for environmental information and technology programs – Requirements with guidance for use” (American Society for Quality, February 2014), by submitting a copy of the proposed contractor’s Quality Management Plan (QMP). The QMP

should be prepared in accordance with “EPA Requirements for Quality Management Plans (QA/R-2),” EPA/240/B-01/002 (Reissued May 2006) or equivalent documentation as determined by EPA. The qualifications of the persons undertaking the Work for Respondents shall be subject to EPA’s review for verification based on objective assessment criteria (e.g., experience, capacity, technical expertise) and that they do not have a conflict of interest with respect to the project.

21. Within 30 days after the Effective Date, Respondents shall designate a Project Coordinator who shall be responsible for administration of the Work required by this Settlement and shall submit to EPA the designated Project Coordinator’s name, title, address, telephone number, email address, and qualifications. To the greatest extent possible, the Project Coordinator shall be present on Site or readily available during the Work. EPA retains the right to disapprove of a designated Project Coordinator who does not meet the requirements of Paragraph 20 (Selection of Contractors, Personnel). If EPA disapproves of the designated Project Coordinator, Respondents shall retain a different Project Coordinator and shall notify EPA of that person’s name, title, contact information, and qualifications within \_\_\_ days following EPA’s disapproval. Notice or communication relating to this Settlement from EPA to Respondents’ Project Coordinator shall constitute notice or communication to all Respondents. **[NOTE: If Respondents’ Project Coordinator has been selected prior to signature of the Settlement, replace the first sentence with the following (and delete the third sentence):** Respondents have designated, and EPA has not disapproved, the following individual as Project Coordinator, who shall be responsible for administration of all actions by Respondents required by this Settlement: **[insert name, title, address, telephone number, and email address].]**

22. EPA has designated \_\_\_\_\_ of the **[insert Regional Office, e.g., Emergency and Enforcement Response Branch, Region \_\_\_]** as its Project Coordinator **[replace with “On-Scene Coordinator” (OSC) or “Remedial Project Manager” (RPM) as appropriate, here and throughout this Settlement.]** EPA will notify Respondents of a change of its designated Project Coordinator. Communications between Respondents and EPA, and all documents concerning the activities performed pursuant to this Settlement, shall be directed to the EPA Project Coordinator in accordance with Paragraph 33.a.

23. EPA’s Project Coordinator shall have the authority lawfully vested in a Remedial Project Manager (RPM) and On-Scene Coordinator (OSC) by the NCP. In addition, EPA’s Project Coordinator shall have the authority, consistent with the NCP, to halt, conduct, or direct any Work required by this Settlement, or to direct any other response action when s/he determines that conditions at the Site constitute an emergency situation or may present a threat to public health or welfare or the environment. Absence of the EPA Project Coordinator from the area under study pursuant to this Settlement shall not be cause for stoppage or delay of Work.

## **VIII. WORK TO BE PERFORMED**

**[NOTE: Regions may choose between two alternatives for this Section, each of which may be modified on a site-by-site basis to reflect Site needs and Regional practice. The Regions may use Alternative 1, modified in accordance with Regional practice, to describe, in general, the major components of the Work at the Site, but without restating the provisions covered by the SOW, or they may use the more detailed Alternative 2, which contains**

provisions found in the SOW. Depending on how the SOW is drafted, use of Alternative 1 may also eliminate the need for other paragraphs in this Section. However, Regions opting to use Alternative 1 must ensure that the following provisions are addressed either in the Settlement or in the SOW as appropriate:

- 1) Paragraph 27.c (Community Involvement Plan) - optional language for Technical Assistance Plans for Superfund Alternative Approach settlements.
- 2) Paragraph 27.e (Reuse Assessment).
- 3) Paragraph 27.f (Baseline Human Health Risk Assessment and Ecological Risk Assessment).
- 4) Paragraph 27.j(1) (Memorandum on Remedial Action Objectives) - inclusion of remedial action objectives for Engineering Controls and Institutional Controls.
- 5) Paragraph 27.k(4) (Alternatives Analysis for Institutional Controls and Screening).

Regions opting to use the more comprehensive Alternative 2 should make sure that any changes made to the SOW are accurately reflected in the applicable provisions of this Settlement. Please note that Alternative 2 is not intended to replace the SOW as it is not a comprehensive restatement of the SOW.

Regions should also address the use of presumptive remedies in the SOW, if appropriate and applicable to any area of the Site. Consult EPA's Guidance titled "Implementing Presumptive Remedies: A Notebook of Guidance and Resource Materials" (EPA 540-R-97-029, October 1997) for more information on the use of presumptive remedies.]

24. For any regulation or guidance referenced in the Settlement, the reference will be read to include any subsequent modification, amendment, or replacement of such regulation or guidance. Such modifications, amendments, or replacements apply to the Work only after Respondents receive notification from EPA of the modification, amendment, or replacement.

25. **[Alternative 1: Paragraphs 25 and 26]** [Respondents shall conduct the RI/FS and prepare all plans in accordance with the provisions of this Settlement, the attached SOW, CERCLA, the NCP, and EPA guidance, including, but not limited to the "Interim Final Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA" ("RI/FS Guidance"), OSWER Directive # 9355.3-01 (October 1988), available at <https://semspub.epa.gov/src/document/11/128301>, "Guidance for Data Useability in Risk Assessment (Part A), Final," OSWER Directive #9285.7-09A, PB 92-963356 (April 1992), available at <http://semspub.epa.gov/src/document/11/156756>, and guidance referenced therein, and guidance referenced in the SOW. The Remedial Investigation (RI) shall consist of collecting data to characterize site conditions, determining the nature and extent of the contamination at or from the Site, assessing risk to human health and the environment, and conducting treatability testing as necessary to evaluate the potential performance and cost of the treatment technologies that are being considered. The Feasibility Study (FS) shall determine and evaluate (based on treatability testing, where appropriate) alternatives for remedial action to prevent, mitigate, or otherwise respond to or remedy the release or threatened release of hazardous substances,

pollutants, or contaminants at or from the Site. The alternatives evaluated must include, but shall not be limited to, the range of alternatives described in the NCP, 40 C.F.R. § 300.430(e), and shall include remedial actions that utilize permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable. In evaluating the alternatives, Respondents shall address the factors required to be taken into account by Section 121 of CERCLA, 42 U.S.C. § 9621, and 40 C.F.R. § 300.430(e).

26. All written documents prepared by Respondents pursuant to this Settlement shall be submitted by Respondents in accordance with Section IX (Submission and Approval of Deliverables). With the exception of progress reports and the Health and Safety Plan, all such submittals will be reviewed and approved by EPA in accordance with Section IX (Submission and Approval of Deliverables). Respondents shall implement all EPA approved, conditionally-approved, or modified deliverables.]

27. **[Alternative 2: Paragraph 27.a.-l] [Activities and Deliverables]**

a. Respondents shall conduct activities and submit deliverables as provided by the SOW, for the development of the RI/FS. All such Work shall be conducted in accordance with the provisions of this Settlement, the attached SOW, CERCLA, the NCP, and EPA guidance, including, but not limited to, the “Interim Final Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA” (“RI/FS Guidance”) (OSWER Directive # 9355.3-01, October 1988), available at <http://semspub.epa.gov/src/document/11/128301>, “Guidance for Data Useability in Risk Assessment (Part A), Final” (OSWER Directive #9285.7-09A, PB 92-963356 (April 1992), available at <http://semspub.epa.gov/src/document/11/156756>, and guidance referenced therein, and guidance referenced in the SOW. The Remedial Investigation (RI) shall consist of collecting data to characterize site conditions, determining the nature and extent of the contamination at or from the Site, assessing risk to human health and the environment, and conducting treatability testing as necessary to evaluate the potential performance and cost of the treatment technologies that are being considered. The Feasibility Study (FS) shall determine and evaluate (based on treatability testing, where appropriate) alternatives for remedial action to prevent, mitigate, or otherwise respond to or remedy the release or threatened release of hazardous substances, pollutants, or contaminants at or from the Site. The general activities that Respondents are required to perform are identified below, followed by a list of deliverables. The tasks that Respondents must perform are described more fully in the SOW and guidance. The activities and deliverables identified below shall be developed as provided in the RI/FS Work Plan and Sampling and Analysis Plan, and shall be submitted to EPA as provided therein. All Work performed under this Settlement shall be in accordance with the schedules in this Settlement or established in the SOW, and in full accordance with the standards, specifications, and other requirements of the RI/FS Work Plan and Sampling and Analysis Plan, as initially approved or modified by EPA, and as may be amended or modified by EPA from time to time.

a. All written documents prepared by Respondents pursuant to this Settlement shall be submitted by Respondents in accordance with Section IX (Submission and Approval of Deliverables). With the exception of progress reports and the Health and Safety Plan, all such submittals will be reviewed and approved by EPA in accordance with Section IX

(Submission and Approval of Deliverables). Respondents shall implement all EPA approved, conditionally-approved, or modified deliverables.

b. **Scoping.** EPA will determine the Site-specific objectives of the RI/FS and devise a general management approach for the Site, as stated in the SOW. Respondents shall conduct the remainder of scoping activities as described in the SOW and referenced guidance. At the conclusion of the project planning phase, as referenced in Chapter 2.2 of the RI/FS Guidance, Respondents shall provide EPA with the following deliverables:

(1) **RI/FS Work Plan.** Within \_\_\_ days after the Effective Date [NOTE: Regions may change this provision to any other appropriate milestone, e.g., within 60 days after notice of contractor approval], Respondents shall submit an RI/FS Work Plan to EPA for review and approval. Upon its approval by EPA pursuant to Section IX (Submission and Approval of Deliverables), the RI/FS Work Plan shall be incorporated into and become enforceable under this Settlement.

**[NOTE: Regions may include the list of items to be included in the RI/FS Work Plan or provide a cross-reference to the SOW provision that lists those items.]**

(2) **Sampling and Analysis Plan.** Within \_\_\_ days after the Effective Date, Respondents shall submit a Sampling and Analysis Plan to EPA for review and approval pursuant to Section IX (Submission and Approval of Deliverables). This plan shall consist of a Field Sampling Plan (FSP) and a Quality Assurance Project Plan (QAPP), as described in the SOW, that is consistent with the NCP, **[insert any contaminant specific or Regional specific applicable guidance documents,]** “Guidance for Quality Assurance Project Plans (QA/G-5),” EPA/240/R-02/009 (December 2002) and **[applicable guidance documents]**, including, but not limited to, “Guidance for Quality Assurance Project Plans (QA/G-5)” EPA/240/R-02/009 (December 2002), “EPA Requirements for Quality Assurance Project Plans (QA/R-5)” EPA/240/B-01/003 (March 2001, reissued May 2006), and “Uniform Federal Policy for Quality Assurance Project Plans,” Parts 1-3, EPA/505/B-04/900A-900C (March 2005). Upon its approval by EPA pursuant to Section IX (Submission and Approval of Deliverables), the Sampling and Analysis Plan shall be incorporated into and become enforceable under this Settlement.

(3) **Health and Safety Plan.** Within \_\_\_ days after the Effective Date, Respondents shall submit for EPA review and comment a Health and Safety Plan that ensures the protection of on-site workers and the public during performance of on-site Work under this Settlement. This plan shall be prepared in accordance with “OSWER Integrated Health and Safety Program Operating Practices for OSWER Field Activities,” Pub. 9285.0-O1C (November 2002), available on the NSCEP database at <https://www.epa.gov/nscep/index.html>, and “EPA’s Emergency Responder Health and Safety Manual,” OSWER Directive 9285.3-12 (July 2005 and updates), available at <https://www.epaossc.org/HealthSafetyManual/manual-index.htm>. In addition, the



plan shall comply with all currently applicable Occupational Safety and Health Administration (OSHA) regulations found at 29 C.F.R. Part 1910. If EPA determines that it is appropriate, the plan shall also include contingency planning. **[NOTE: Regions may provide more detail, e.g., Spill Prevention Control and Countermeasures Plan, evacuation plans, etc.]** Respondents shall incorporate all changes to the plan provided by EPA and shall implement the plan during the pendency of the RI/FS.

c. **Community Involvement Plan [insert the following for Superfund Alternative Approach settlements: and Technical Assistance Plan]**. EPA will prepare a community involvement plan, in accordance with EPA guidance and the NCP.

(1) If requested by EPA, Respondents shall participate in community involvement activities, including participation in (i) the preparation of information regarding the Work for dissemination to the public, with consideration given to including mass media and/or Internet notification, and (ii) public meetings that may be held or sponsored by EPA to explain activities at or relating to the Site. Respondents' support of EPA's community involvement activities may include providing online access to initial submissions and updates of deliverables to (i) any Community Advisory Groups, (ii) any Technical Assistance Grant recipients and their advisors, and (iii) other entities to provide them with a reasonable opportunity for review and comment. EPA may describe in its community involvement plan Respondents' responsibilities for community involvement activities. All community involvement activities conducted by Respondents at EPA's request are subject to EPA's oversight. **[Insert if the Region contemplates conducting enhanced community involvement during the RI/FS: Upon EPA's request, Respondents shall make all deliverables available on a website that is accessible to the public.]** Upon EPA's request, Respondents shall establish a community information repository at or near the Site to house one copy of the administrative record.

(2) As requested by EPA, Respondents shall, within [15] days, designate and notify EPA of Respondents' Community Involvement Coordinator ("CI Coordinator"). Respondents may hire a contractor for this purpose. Respondents' notice must include the name, title, and qualifications of the Respondents' CI Coordinator. Respondents' CI Coordinator is responsible for providing support regarding EPA's community involvement activities, including coordinating with EPA's CI Coordinator regarding responses to the public's inquiries about the Site.

**[NOTE: The sample language below is an additional provision that Regions should add to provide for technical assistance for community representatives during response actions for Superfund Alternative Approach settlements and at other appropriate sites:**

(3) Within 30 days after a request by EPA, Respondents shall provide EPA with a Technical Assistance Plan (TAP) for arranging (at Respondents' own expense up to \$50,000) for a qualified community group: (i) to receive services

from [an] independent technical advisor[s] who can help group members understand Site cleanup issues, and (ii) to share this information with others in the community during the Work conducted pursuant to this Settlement. The TAP shall state that Respondents will provide and arrange for any additional assistance needed if the selected community group demonstrates such a need as provided in the SOW prior to EPA's issuance of the Record of Decision contemplated by this Settlement. If EPA disapproves of or requires revisions to Respondents' draft TAP, in whole or in part, then Respondents shall amend and submit to EPA a revised TAP that is responsive to EPA's comments, within \_\_\_ days after receiving EPA's comments.]

d. **Site Characterization.** Following EPA approval or modification of the RI/FS Work Plan and Sampling and Analysis Plan, Respondents shall implement the provisions of these plans to characterize the Site. Respondents shall complete Site characterization and submit all deliverables in accordance with the schedules and deadlines established in this Settlement, the attached SOW, and/or the EPA-approved RI/FS Work Plan and Sampling and Analysis Plan.

e. **Reuse Assessment.** If EPA determines that a Reuse Assessment is necessary,<sup>2</sup> Respondents will perform the Reuse Assessment in accordance with the SOW, RI/FS Work Plan, and applicable guidance. The Reuse Assessment should provide sufficient information to develop realistic assumptions of the reasonably anticipated future uses for the Site. Respondents shall prepare the Reuse Assessment in accordance with EPA guidance, including, but not limited to: "Reuse Assessments: A Tool to Implement the Superfund Land Use Directive." OSWER Directive 9355.7-06P (June 2001).<sup>3</sup>

f. **Baseline Human Health Risk Assessment and Ecological Risk Assessment.**<sup>4</sup> Respondents will perform the Baseline Human Health Risk Assessment and Ecological Risk Assessment ("Risk Assessments") in accordance with the SOW, RI/FS Work Plan, and applicable EPA guidance, including but not limited to: "Interim Final Risk Assessment Guidance for Superfund, Volume I - Human Health Evaluation Manual (Part A)," RAGS, EPA-540-1-89-002, OSWER Directive 9285.7-01A (December 1989); "Interim Final Risk Assessment Guidance for Superfund, Volume I - Human Health Evaluation Manual (Part D, Standardized Planning, Reporting, and Review of Superfund Risk Assessments)," RAGS, EPA-540-R-97-033, OSWER Directive 9285.7-01D (January 1998); and "Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments," ERAGS, EPA-540-R-97-006, OSWER Directive 9285.7-25 (June 1997).

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<sup>2</sup> OSWER Directive No. 9355.7-06P, "Reuse Assessments: A Tool To Implement The Superfund Land Use Directive," states that "[d]etermining the applicability and scope of a reuse assessment will be dependent on site specific circumstances and/or the overall approach anticipated for addressing the site." The guidance indicates that a reuse assessment may not be necessary at every site.

<sup>3</sup> This guidance permits, in general, the party performing the RI/FS to perform the reuse assessment. EPA can determine the appropriate level of oversight when PRPs perform the reuse assessment.

<sup>4</sup> OSWER Directive No. 9340.1-02, "Revised Policy on Performance of Risk Assessments During Remedial Investigation/Feasibility Studies (RI/FS) Conducted by Potentially Responsible Parties," permits PRPs to perform the baseline risk assessment where appropriate. Consult the policy document for criteria for deciding whether or not to allow the PRPs to perform the risk assessment.

g. **Draft RI Report.** Within \_\_\_ days after EPA's approval of the Risk Assessments, Respondents shall submit to EPA for review and approval pursuant to Section IX (Submission and Approval of Deliverables), a draft Remedial Investigation Report ("RI Report") consistent with the SOW, RI/FS Work Plan, and Sampling and Analysis Plan. The draft RI Report shall also contain the Risk Assessments.

h. **Treatability Studies.** Respondents shall conduct treatability studies, except where Respondents can demonstrate to EPA's satisfaction that they are not needed. The major components of the treatability studies are described in the SOW. In accordance with the schedules or deadlines established in this Settlement, its attached SOW, and/or the EPA-approved RI/FS Work Plan, Respondents shall provide EPA with the following deliverables for review and approval pursuant to Section IX (Submission and Approval of Deliverables):

(1) **Identification of Candidate Technologies Memorandum.** This memorandum shall be submitted [insert "within \_\_\_ days after the Effective Date," "as specified by EPA," or other scheduling provision preferred by the Region].

(2) **Treatability Test Statement of Work.** If EPA determines that treatability testing is required, within \_\_\_ days thereafter [or as specified by EPA], Respondents shall submit a Treatability Test Statement of Work (TTSOW).

(3) **Treatability Test Work Plan.** Within \_\_\_ days after submission of the TTSOW, Respondents shall submit a Treatability Test Work Plan, including a schedule.

(4) **Treatability Study Sampling and Analysis Plan.** Within \_\_\_ days after identification of the need for a separate or revised QAPP or FSP, Respondents shall submit a Treatability Study Sampling and Analysis Plan.

(5) **Treatability Study Evaluation Report.** Within \_\_\_ days after completion of any treatability testing, Respondents shall submit a treatability study evaluation report as provided in the SOW and RI/FS Work Plan.

i. **Treatability Study Health and Safety Plan.** Within \_\_\_ days after the identification of the need for a revised Health and Safety Plan, Respondents shall submit a Treatability Study Health and Safety Plan.

j. **Development and Screening of Alternatives.** Respondents shall develop an appropriate range of waste management options that will be evaluated through the development and screening of alternatives, as provided in the SOW and RI/FS Work Plan. In accordance with the schedules or deadlines established in this Settlement, the SOW, and/or the EPA-approved RI/FS Work Plan, Respondents shall provide EPA with the following deliverables for review and approval pursuant to Section IX (Submission and Approval of Deliverables):

(1) **Memorandum on Remedial Action Objectives.** The Memorandum on Remedial Action Objectives shall include remedial action objectives for Engineering Controls as well as for Institutional Controls.

(2) **Memorandum on Development and Screening of Alternatives.**

The Memorandum on Development and Screening of Alternatives shall summarize the development and screening of remedial alternatives.

k. **Detailed Analysis of Alternatives.** Respondents shall conduct a detailed analysis of remedial alternatives, as described in the SOW and RI/FS Work Plan. In accordance with the deadlines or schedules established in this Settlement, the attached SOW, and/or the EPA-approved RI/FS Work Plan Respondents shall provide EPA with the following deliverables for review and approval pursuant to Section IX (Submission and Approval of Deliverables):

(1) **Individual Analysis of Alternatives.** Within \_\_ days after [insert appropriate milestone], Respondents shall conduct an assessment of individual alternatives against each of the nine evaluation criteria, as described in the SOW, and prepare a summary report.

(2) **Comparative Analysis of Alternatives.** Within \_\_ days after [insert appropriate milestone], Respondents shall conduct a comparative analysis of alternatives to evaluate the relative performance of each alternative in relation to the nine evaluation criteria, as described in the SOW, and prepare a summary report.

(3) Within \_\_ days after [insert appropriate milestone], Respondents shall prepare a summary report of the findings of the FS, including the above analyses, and present the results to EPA.

(4) **Alternatives Analysis for ICs and Screening.** Respondents shall submit a memorandum on the ICs identified in the Memorandum on Development and Screening of Alternatives as potential remedial actions. The Alternatives Analysis for ICs and Screening shall (i) describe the restrictions needed on land, water, or other resources and their relationship to the remedial action objectives; (ii) determine the specific types of ICs that can be used to address and implement the land, water, or other resource use restrictions; (iii) investigate when the ICs need to be implemented and how long they must remain in place; (iv) research, discuss, and document any agreement or other arrangements with the proper entities (e.g., state, local government, local landowners, conservation organizations, Respondents) on exactly who will be responsible for implementing, maintaining, and enforcing the ICs.<sup>5</sup> The Alternatives Analysis for ICs and Screening shall also evaluate the ICs identified in the Memorandum on Development and Screening of Alternatives against the nine evaluation criteria outlined in the NCP (40 C.F.R. § 300.430(e)(9)(iii)) for CERCLA cleanups,

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<sup>5</sup> See “Institutional Controls: A Site Manager’s Guide to Identifying, Evaluating and Selecting Institutional Controls at Superfund and RCRA Corrective Action Cleanups” (“A Site Manager’s Guide to ICs”), OSWER Directive 9355.0-74FS-P (September 2000) and “Institutional Controls: A Guide to Planning, Implementing, Maintaining, and Enforcing Institutional Controls at Contaminated Sites” (“PIME IC Guide”), OSWER Directive 9355.0-89 (November 2010) for guidance on these considerations.

including but not limited to costs to implement, maintain, and/or enforce the ICs.<sup>6</sup> The Alternatives Analysis for ICs and Screening shall be submitted as an appendix to the draft Feasibility Study Report (“FS Report”).

1. **Draft FS Report.** Within \_\_\_ days after the presentation to EPA described in Paragraph 27.k(4), Respondents shall submit to EPA a draft FS Report for review and approval pursuant to Section IX (Submission and Approval of Deliverables). Respondents shall refer to Table 6-5 of the RI/FS Guidance for report content and format. The draft FS Report as amended, and the administrative record, shall provide the basis for the proposed plan under Sections 113(k) and 117(a) of CERCLA, 42 U.S.C. §§ 9613(k) and 9617(a), by EPA, and shall document the development and analysis of remedial alternatives.] **[End of Alternative 2]**

28. Upon receipt of the draft Feasibility Study Report (“FS Report”), EPA will evaluate, as necessary, the estimates of the risk to the public and environment that are expected to remain after a particular remedial alternative has been completed and will evaluate the cost, implementability, and long-term effectiveness of any proposed ICs for that alternative.

29. **Modification of the RI/FS Work Plan**

a. If at any time during the RI/FS process, Respondents identify a need for additional data, Respondents shall submit a memorandum documenting the need for additional data to EPA’s Project Coordinator within \_\_\_ days after identification. EPA in its discretion will determine whether the additional data will be collected by Respondents and whether it will be incorporated into deliverables.

b. In the event of unanticipated or changed circumstances at the Site, Respondents shall notify EPA’s Project Coordinator by telephone within 24 hours of discovery of the unanticipated or changed circumstances. In the event that EPA determines that the unanticipated or changed circumstances warrant changes in the RI/FS Work Plan, EPA shall modify the RI/FS Work Plan in writing accordingly or direct Respondents to modify and submit the modified RI/FS Work Plan to EPA for approval. Respondents shall perform the RI/FS Work Plan as modified.

c. EPA may determine that, in addition to tasks defined in the initially approved RI/FS Work Plan, other additional work may be necessary to accomplish the objectives of the RI/FS. Respondents shall perform these response actions in addition to those required by the initially approved RI/FS Work Plan, including any approved modifications, if EPA determines that such actions are necessary for a thorough RI/FS.

d. Respondents shall confirm their willingness to perform the additional work in writing to EPA within 7 days after receipt of the EPA request. If Respondents object to any modification determined by EPA to be necessary pursuant to this Paragraph, Respondents may seek dispute resolution pursuant to Section XVIII (Dispute Resolution). The SOW and/or RI/FS Work Plan shall be modified in accordance with the final resolution of the dispute.

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<sup>6</sup> See A Site Manager’s Guide to ICs, *id.*, for discussion of what factors to consider with respect to evaluation of ICs under the nine criteria. It is not necessary to evaluate “reduction of toxicity, mobility or volume through treatment” in the context of ICs. See the PIME IC Guide, *id.*, for further discussion of ICs lifecycle considerations.

e. Respondents shall complete the additional work according to the standards, specifications, and schedule set forth or approved by EPA in a written modification to the RI/FS Work Plan or written RI/FS Work Plan supplement. EPA reserves the right to conduct the work itself, to seek reimbursement from Respondents for the costs incurred in performing the work, and/or to seek any other appropriate relief.

f. Nothing in this Paragraph shall be construed to limit EPA's authority to require performance of further response actions at the Site.

### **30. Off-Site Shipments**

a. Respondents may ship hazardous substances, pollutants, and contaminants from the Site to an off-Site facility only if they comply with Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), and 40 C.F.R. § 300.440. Respondents will be deemed to be in compliance with CERCLA § 121(d)(3) and 40 C.F.R. § 300.440 regarding a shipment if Respondents obtain a prior determination from EPA that the proposed receiving facility for such shipment is acceptable under the criteria of 40 C.F.R. § 300.440(b).

b. Respondents may ship Waste Material from the Site to an out-of-state waste management facility only if, prior to any shipment, they provide written notice to the appropriate state environmental official in the receiving facility's state and to EPA's Project Coordinator. This notice requirement shall not apply to any off-Site shipments when the total quantity of all such shipments will not exceed ten cubic yards. The written notice must include the following information, if available: (1) the name and location of the receiving facility; (2) the type and quantity of Waste Material to be shipped; (3) the schedule for the shipment; and (4) the method of transportation. Respondents shall also notify the state environmental official referenced above and EPA's Project Coordinator of any major changes in the shipment plan, such as a decision to ship the Waste Material to a different out-of-state facility. Respondents shall provide the written notice after the award of the contract for the RI/FS and before the Waste Material is shipped.

c. Respondents may ship Investigation Derived Waste (IDW) from the Site to an off-Site facility only if they comply with Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), 40 C.F.R. § 300.440, EPA's "Guide to Management of Investigation Derived Waste," OSWER 9345.3-03FS (Jan. 1992), and any IDW-specific requirements contained in the SOW. Wastes shipped off-Site to a laboratory for characterization, and RCRA hazardous wastes that meet the requirements for an exemption from RCRA under 40 C.F.R. § 261.4(e) shipped off-Site for treatability studies, are not subject to 40 C.F.R. § 300.440.

**[NOTE: Paragraphs 31 and 32 below may be modified on a site-by-site basis to reflect Site needs and Regional practice.]**

31. **Meetings.** Respondents shall make presentations at, and participate in, meetings at the request of EPA during the preparation of the RI/FS. In addition to discussion of the technical aspects of the RI/FS, topics will include anticipated problems or new issues. Meetings will be scheduled at EPA's discretion.

32. **Progress Reports.** In addition to the deliverables set forth in this Settlement, Respondents shall submit written [monthly] progress reports to EPA by the \_\_\_\_ day of the following month. At a minimum, with respect to the preceding month, these progress reports shall:

- a. describe the actions that have been taken to comply with this Settlement;
- b. include all results of sampling and tests and all other data received by Respondents;
- c. describe Work planned for the next two months with schedules relating such Work to the overall project schedule for RI/FS completion; and
- d. describe all problems encountered in complying with the requirements of this Settlement and any anticipated problems, any actual or anticipated delays, and solutions developed and implemented to address any actual or anticipated problems or delays.

## **IX. SUBMISSION AND APPROVAL OF DELIVERABLES**

### **33. Submission of Deliverables**

#### **a. General Requirements for Deliverables**

(1) Except as otherwise provided in this Settlement, Respondents shall direct all submissions required by this Settlement to EPA's Project Coordinator at **[insert EPA Project Coordinator's name, address, phone number, email]** and to the State at **[insert contact information]**. Respondents shall submit all deliverables required by this Settlement, [the attached SOW,] or any approved work plan in accordance with the schedule set forth in such plan.

(2) Respondents shall submit all deliverables in electronic form. Technical specifications for sampling and monitoring data and spatial data are addressed in Paragraph 33.b. All other deliverables shall be submitted in the electronic form specified by EPA's Project Coordinator. If any deliverable includes maps, drawings, or other exhibits that are larger than 8.5 x 11 inches, Respondents shall also provide paper copies of such exhibits. **[NOTE: If paper copies of specific deliverables (in addition to large exhibits) are needed, this paragraph should be edited accordingly.]**

#### **b. Technical Specifications for Deliverables**

**[NOTE: The information in this paragraph is consistent with the EPA National Geospatial Data Policy 2008, which is under review and may be revised at any time. The case team should check <https://www.epa.gov/geospatial/geospatial-policies-and-standards> for the latest guidance on the policy and associated EPA and CERCLA procedures and technical specifications, including standards and quality assurance for geographic information system (GIS) deliverables.]**

(1) Sampling and monitoring data should be submitted in standard regional Electronic Data Deliverable (EDD) format. [**Specify the EDD format that the Region uses.**] Other delivery methods may be allowed if electronic direct submission presents a significant burden or as technology changes.

(2) Spatial data, including spatially-referenced data and geospatial data, should be submitted: (i) in the ESRI File Geodatabase format [**or insert Regionally-preferred spatial file format**]; and (ii) as unprojected geographic coordinates in decimal degree format using North American Datum 1983 (NAD83) or World Geodetic System 1984 (WGS84) as the datum. If applicable, submissions should include the collection method(s). Projected coordinates may optionally be included but must be documented. Spatial data should be accompanied by metadata, and such metadata should be compliant with the Federal Geographic Data Committee (FGDC) Content Standard for Digital Geospatial Metadata and its EPA profile, the EPA Geospatial Metadata Technical Specification. An add-on metadata editor for ESRI software, the EPA Metadata Editor (EME), complies with these FGDC and EPA metadata requirements and is available at <https://edg.epa.gov/EME/>.

(3) Each file must include an attribute name for each site unit or sub-unit submitted. Consult <https://www.epa.gov/geospatial/geospatial-policies-and-standards> for any further available guidance on attribute identification and naming.

(4) Spatial data submitted by Respondents does not, and is not intended to, define the boundaries of the Site.

#### 34. **Approval of Deliverables**

##### a. **Initial Submissions**

(1) After review of any deliverable that is required to be submitted for EPA approval under this Settlement [**insert if applicable:** or the attached SOW], EPA shall: (i) approve, in whole or in part, the submission; (ii) approve the submission upon specified conditions; (iii) disapprove, in whole or in part, the submission; or (iv) any combination of the foregoing.

(2) EPA also may modify the initial submission to cure deficiencies in the submission if: (i) EPA determines that disapproving the submission and awaiting a resubmission would cause substantial disruption to the Work; or (ii) previous submission(s) have been disapproved due to material defects and the deficiencies in the initial submission under consideration indicate a bad faith lack of effort to submit an acceptable deliverable.

b. **Resubmissions.** Upon receipt of a notice of disapproval under Paragraph 34.a(1) (Initial Submissions), or if required by a notice of approval upon specified conditions under Paragraph 34.a(1), Respondents shall, within \_\_ days or such longer time as specified by EPA in such notice, correct the deficiencies and resubmit the deliverable for



approval. After review of the resubmitted deliverable, EPA may: (a) approve, in whole or in part, the resubmission; (b) approve the resubmission upon specified conditions; (c) modify the resubmission; (d) disapprove, in whole or in part, the resubmission, requiring Respondents to correct the deficiencies; or (e) any combination of the foregoing.

c. **Implementation.** Upon approval, approval upon conditions, or modification by EPA under Paragraph 34.a (Initial Submissions) or Paragraph 34.b (Resubmissions), of any deliverable, or any portion thereof: (i) such deliverable, or portion thereof, will be incorporated into and enforceable under the Settlement; and (ii) Respondents shall take any action required by such deliverable, or portion thereof. Implementation of any non-deficient portion of a submission shall not relieve Respondents of any liability for penalties under Section XX (Stipulated Penalties) for violations of this Settlement.

35. Notwithstanding the receipt of a notice of disapproval, Respondents shall proceed to take any action required by any non-deficient portion of the submission, unless otherwise directed by EPA.

36. In the event that EPA takes over some of the tasks, but not the preparation of the Remedial Investigation Report ("RI Report") or the FS Report, Respondents shall incorporate and integrate information supplied by EPA into those reports.

37. Respondents shall not proceed with any activities or tasks dependent on the following deliverables until receiving EPA approval, approval on condition, or modification of such deliverables: RI/FS Work Plan; Sampling and Analysis Plan; draft RI Report; Treatability Testing Work Plan; Treatability Testing Sampling and Analysis Plan; Treatability Testing Health and Safety Plan [**delete any of the foregoing not required as a deliverable and add any additional deliverables, if desired**]; and draft FS Report. While awaiting EPA approval, approval on condition, or modification of these deliverables, Respondents shall proceed with all other tasks and activities that may be conducted independently of these deliverables, in accordance with the schedule set forth under this Settlement.

38. For all remaining deliverables not listed in Paragraph 37, Respondents shall proceed with all subsequent tasks, activities, and deliverables without awaiting EPA approval of the submitted deliverable. EPA reserves the right to stop Respondents from proceeding further, either temporarily or permanently, on any task, activity or deliverable at any point during the Work.

39. **Material Defects.** If an initially submitted or resubmitted plan, report, or other deliverable contains a material defect, and the plan, report, or other deliverable is disapproved or modified by EPA under Paragraph 34.a (Initial Submissions) or 34.b (Resubmissions) due to such material defect, Respondents shall be deemed in violation of this Settlement for failure to submit such plan, report, or other deliverable timely and adequately. Respondents may be subject to penalties for such violation as provided in Section XX (Stipulated Penalties).

40. Neither failure of EPA to expressly approve or disapprove of Respondents' submissions within a specified time period, nor the absence of comments, shall be construed as approval by EPA.

## **X. QUALITY ASSURANCE, SAMPLING, AND DATA ANALYSIS**

41. Respondents shall use quality assurance, quality control, and other technical activities and chain of custody procedures for all samples consistent with “EPA Requirements for Quality Assurance Project Plans (QA/R5),” EPA/240/B-01/003 (March 2001, reissued May 2006), “Guidance for Quality Assurance Project Plans (QA/G-5),” EPA/240/R-02/009 (December 2002), and “Uniform Federal Policy for Quality Assurance Project Plans, Parts 1-3, EPA/505/B-04/900A-900C (March 2005).

### **42. Laboratories**

a. Respondents shall ensure that EPA [and State] personnel and its [their] authorized representatives are allowed access at reasonable times to all laboratories utilized by Respondents pursuant to this Settlement. In addition, Respondents shall ensure that such laboratories shall analyze all samples submitted by EPA pursuant to the Quality Assurance Project Plan (QAPP) for quality assurance, quality control, and technical activities that will satisfy the stated performance criteria as specified in the QAPP and that sampling and field activities are conducted in accordance with EPA’s “Field Operations Group Operational Guidelines for Field Activities” (<http://www.epa.gov/region8/qa/FieldOperationsGroupOperationalGuidelinesForFieldActivities.pdf>) and “EPA QA Field Activities Procedure” CIO 2105-P-02.1 (9/23/2014), available at <https://www.epa.gov/irmpoli8/epa-qa-field-activities-procedures>. Respondents shall ensure that the laboratories they utilize for the analysis of samples taken pursuant to this Settlement meet the competency requirements set forth in EPA’s “Policy to Assure Competency of Laboratories, Field Sampling, and Other Organizations Generating Environmental Measurement Data under Agency-Funded Acquisitions,” available at <https://www.epa.gov/measurements/documents-about-measurement-competency-under-acquisition-agreements>, and that the laboratories perform all analyses using EPA-accepted methods. Accepted EPA methods consist of, but are not limited to, methods that are documented in the EPA’s Contract Laboratory Program (<https://www.epa.gov/superfund/programs/clp/>), SW 846 “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods” (<https://www.epa.gov/hw-sw846>), “Standard Methods for the Examination of Water and Wastewater” (<http://www.standardmethods.org/>), and 40 C.F.R. Part 136, “Air Toxics - Monitoring Methods” (<https://www.epa.gov/ttnamtl1/airtox.html>).

b. Upon approval by EPA [, after a reasonable opportunity for review and comment by the State], Respondents may use other appropriate analytical methods, as long as (i) quality assurance/quality control (QA/QC) criteria are contained in the methods and the methods are included in the QAPP, (ii) the analytical methods are at least as stringent as the methods listed above, and (iii) the methods have been approved for use by a nationally recognized organization responsible for verification and publication of analytical methods, e.g., EPA, ASTM, NIOSH, OSHA, etc.

c. Respondents shall ensure that all laboratories they use for analysis of samples taken pursuant to this Settlement have a documented Quality System that complies with ASQ/ANSI E4:2014 “Quality Management Systems for Environmental Information and Technology Programs – Requirements With Guidance for Use” (American Society for Quality, February 2014), and “EPA Requirements for Quality Management Plans (QA/R-2)” EPA/240/B-

01/002 (March 2001, reissued May 2006), or equivalent documentation as determined by EPA. EPA may consider Environmental Response Laboratory Network (ERLN) laboratories, laboratories accredited under the National Environmental Laboratory Accreditation Program (NELAP), or laboratories that meet International Standardization Organization (ISO 17025) standards or other nationally recognized programs as meeting the Quality System requirements.

d. Respondents shall ensure that all field methodologies utilized in collecting samples for subsequent analysis pursuant to this Settlement are conducted in accordance with the procedures set forth in the approved QAPP.

#### 43. **Sampling**

a. Upon request, Respondents shall provide split or duplicate samples to EPA [and the State] or its [their] authorized representatives. Respondents shall notify EPA [and the State] not less than [7] days in advance of any sample collection activity unless shorter notice is agreed to by EPA. In addition, EPA [and the State] shall have the right to take any additional samples that EPA [or the State] deem[s] necessary. Upon request, EPA [and the State] shall provide to Respondents split or duplicate samples of any samples it [they] take[s] as part of EPA's oversight of Respondents' implementation of the Work, and any such samples shall be analyzed in accordance with the approved QAPP.

b. Respondents shall submit to EPA [and the State], in the next monthly progress report as described in Paragraph 32 (Progress Reports) the results of all sampling and/or tests or other data obtained or generated by or on behalf of Respondents with respect to the Site and/or the implementation of this Settlement.

c. Respondents waive any objections to any data gathered, generated, or evaluated by EPA, the State or Respondents in the performance or oversight of the Work that has been verified according to the quality assurance/quality control (QA/QC) procedures required by the Settlement or any EPA-approved RI/FS Work Plans or Sampling and Analysis Plans. If Respondents object to any other data relating to the RI/FS, Respondents shall submit to EPA a report that specifically identifies and explains its objections, describes the acceptable uses of the data, if any, and identifies any limitations to the use of the data. The report must be submitted to EPA within 15 days after the monthly progress report containing the data.

### **XI. PROPERTY REQUIREMENTS**

**[NOTE: Here and in other places in this section, optional text to be used if there is an Owner Respondent is set off in brackets.]**

44. **Agreements Regarding Access and Non-Interference.** Respondents shall, with respect to any Non-Settling Owner's Affected Property, use best efforts to secure from such Non-Settling Owner an agreement, enforceable by Respondents and the United States, providing that such Non-Settling Owner **[if Owner Respondent: , and Owner Respondent shall, with respect to Owner Settling Respondent's Affected Property]:** (i) provide EPA [, the State,] and the other Respondents, and their representatives, contractors, and subcontractors with access at all reasonable times to such Affected Property to conduct any activity regarding the Settlement, including those listed in Paragraph 44.a (Access Requirements); and (ii) refrain from using such

Affected Property in any manner that EPA determines will [pose an unacceptable risk to human health or to the environment due to exposure to Waste Material, or] interfere with or adversely affect the implementation or integrity of the Work [**use if applicable:** , including the restrictions listed in Paragraph 44.b (Land, Water, or Other Resource Use Restrictions)].

a. **Access Requirements.** The following is a list of activities for which access is required regarding the Affected Property:

**[NOTE: Augment this list as appropriate.]**

- (1) Monitoring the Work;
- (2) Verifying any data or information submitted to EPA [or the State];
- (3) Conducting investigations regarding contamination at or near the Site;
- (4) Obtaining samples;
- (5) Assessing the need for, planning, implementing, or monitoring response actions;
- (6) Assessing implementation of quality assurance and quality control practices as defined in the approved QAPP;
- (7) Implementing the Work pursuant to the conditions set forth in Paragraph 89 (Work Takeover);
- (8) Inspecting and copying records, operating logs, contracts, or other documents maintained or generated by Respondents or their agents, consistent with Section XII (Access to Information);
- (9) Assessing Respondents' compliance with the Settlement;
- (10) Determining whether the Affected Property is being used in a manner that is prohibited or restricted, or that may need to be prohibited or restricted under the Settlement; and
- (11) Implementing, monitoring, maintaining, reporting on, and enforcing any land, water, or other resource use restrictions regarding the Affected Property.

**[NOTE: Include Paragraph 44.b if land, water, or other resource use restrictions are needed. If Proprietary Controls selected in an action memorandum are required to restrict land, water, or other resource use during performance of the RI/FS, consult Appendix A, Optional Model Institutional Controls Language, of the “Model Administrative Settlement Agreement and Order on Consent for Removal Actions”]**

([https://cfpub.epa.gov/compliance/models/view.cfm?model\\_ID=754](https://cfpub.epa.gov/compliance/models/view.cfm?model_ID=754)) for appropriate language.]

b. [Land, Water, or Other Resource Use Restrictions. The following is a list of land, water, or other resource use restrictions applicable to the Affected Property:

[NOTE: Customize and augment this list as appropriate. Be as specific as possible.]

(1) Prohibiting the following activities that could interfere with the Work: \_\_\_\_\_; and

(2) Ensuring that any new structures will not be constructed in the following manner that could interfere with the Work: \_\_\_\_\_.]

45. **Best Efforts.** As used in this Section, “best efforts” means the efforts that a reasonable person in the position of Respondents would use so as to achieve the goal in a timely manner, including the cost of employing professional assistance and the payment of reasonable sums of money to secure access and/or use restriction agreements, as required by this Section. If Respondents are unable to accomplish what is required through “best efforts” in a timely manner, they shall notify EPA and include a description of the steps taken to comply with the requirements. If EPA deems it appropriate, it may assist Respondents, or take independent action, in obtaining such access and/or use restrictions. All costs incurred by the United States in providing such assistance or taking such action, including the cost of attorney time and the amount of monetary consideration or just compensation paid, constitute Future Response Costs to be reimbursed under Section XVI (Payment of Response Costs).

46. If EPA determines in a decision document prepared in accordance with the NCP that Institutional Controls in the form of state or local laws, regulations, ordinances, zoning restrictions, or other governmental controls or notices are needed, Respondents shall cooperate with EPA’s [and the State’s] efforts to secure and ensure compliance with such Institutional Controls.

47. **[Insert if needed: Notice to Successors-in-Title**

a. Owner Respondent shall, within 15 days after the Effective Date, submit for EPA approval a notice to be filed regarding Owner Respondent’s Affected Property in the appropriate land records. The notice must: (1) include a proper legal description of the Affected Property; (2) provide notice to all successors-in-title that: (i) the Affected Property is part of, or related to, the Site; (ii) EPA has entered into an agreement with Respondents for performance of an RI/FS with respect to the Affected Property; and (iii) potentially responsible parties have entered into an Administrative Settlement Agreement and Order on Consent requiring performance of the RI/FS; and (3) identify the name, docket number, and effective date of this Settlement. Owner Respondent shall record the notice within 10 days after EPA’s approval of the notice and submit to EPA, within 10 days thereafter, a certified copy of the recorded notice.

b. Owner Respondent shall, prior to entering into a contract to Transfer Owner Respondent’s Affected Property, or 60 days prior to Transferring Owner Respondent’s Affected Property, whichever is earlier:

(1) Notify the proposed transferee that EPA has entered into an agreement with Respondents for performance of an RI/FS with respect to the Affected Property (identifying the name, docket number, and the effective date of this Settlement); and

(2) Notify EPA [and the State] of the name and address of the proposed transferee and provide EPA [and the State] with a copy of the notice that it provided to the proposed transferee.]

48. In the event of any Transfer of the Affected Property, unless EPA otherwise consents in writing, Respondents shall continue to comply with their obligations under the Settlement, including their obligation to secure access and ensure compliance with any land, water, or other resource use restrictions regarding the Affected Property.

49. Notwithstanding any provision of the Settlement, EPA [and the State] retain[s] all of its [their] access authorities and rights, as well as all of its [their] rights to require land, water, or other resource use restrictions, including enforcement authorities related thereto under CERCLA, RCRA, and any other applicable statute or regulations.

## **XII. ACCESS TO INFORMATION**

50. Respondents shall provide to EPA [and the State], upon request, copies of all records, reports, documents, and other information (including records, reports, documents, and other information in electronic form) (hereinafter referred to as “Records”) within Respondents’ possession or control or that of their contractors or agents relating to activities at the Site or to the implementation of this Settlement, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information regarding the Work. Respondents shall also make available to EPA [and the State], for purposes of investigation, information gathering, or testimony, their employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

### **51. Privileged and Protected Claims**

a. Respondents may assert that all or part of a Record requested by EPA [or the State] is privileged or protected as provided under federal law, in lieu of providing the Record, provided Respondents comply with Paragraph 51.b, and except as provided in Paragraph 51.c.

b. If Respondents assert a claim of privilege or protection, they shall provide EPA [and the State] with the following information regarding such Record: its title; its date; the name, title, affiliation (e.g., company or firm), and address of the author, of each addressee, and of each recipient; a description of the Record’s contents; and the privilege or protection asserted. If a claim of privilege or protection applies only to a portion of a Record, Respondents shall provide the Record to EPA [and the State] in redacted form to mask the privileged or protected portion only. Respondents shall retain all Records that they claim to be privileged or protected until EPA [and the State] has [have] had a reasonable opportunity to dispute the privilege or protection claim and any such dispute has been resolved in Respondents’ favor.

c. Respondents may make no claim of privilege or protection regarding: (1) any data regarding the Site, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, radiological, or engineering data, or the portion of any other Record that evidences conditions at or around the Site; or (2) the portion of any Record that Respondents are required to create or generate pursuant to this Settlement.

52. **Business Confidential Claims.** Respondents may assert that all or part of a Record provided to EPA [and the State] under this Section or Section XIII (Record Retention) is business confidential to the extent permitted by and in accordance with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), and 40 C.F.R. § 2.203(b). Respondents shall segregate and clearly identify all Records or parts thereof submitted under this Settlement for which Respondents assert business confidentiality claims. Records claimed as confidential business information will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies Records when they are submitted to EPA [and the State], or if EPA has notified Respondents that the Records are not confidential under the standards of Section 104(e)(7) of CERCLA or 40 C.F.R. Part 2, Subpart B, the public may be given access to such Records without further notice to Respondents.

53. Notwithstanding any provision of this Settlement, EPA [and the State] retain[s] all of its [their] information gathering and inspection authorities and rights, including enforcement actions related thereto, under CERCLA, RCRA, and any other applicable statutes or regulations.

### **XIII. RECORD RETENTION**

54. Until 10 years after EPA provides Respondents with notice, pursuant to Section XXX (Notice of Completion of Work), that all Work has been fully performed in accordance with this Settlement, each Respondent shall preserve and retain all non-identical copies of Records (including Records in electronic form) now in its possession or control, or that come into its possession or control, that relate in any manner to its liability under CERCLA with regard to the Site, provided, however, that Respondents who are potentially liable as owners or operators of the Site must retain, in addition, all Records that relate to the liability of any other person under CERCLA with respect to the Site. Each Respondent must also retain, and instruct its contractors and agents to preserve, for the same period of time specified above all non-identical copies of the last draft or final version of any Records (including Records in electronic form) now in its possession or control or that come into its possession or control that relate in any manner to the performance of the Work, provided, however, that each Respondent (and its contractors and agents) must retain, in addition, copies of all data generated during the performance of the Work and not contained in the aforementioned Records required to be retained. Each of the above record retention requirements shall apply regardless of any corporate retention policy to the contrary.

55. At the conclusion of the document retention period, Respondents shall notify EPA [and the State] at least 90 days prior to the destruction of any such Records, and, upon request by EPA [or the State], and except as provided in Paragraph 51 (Privileged and Protected Claims), Respondents shall deliver any such Records to EPA [or the State].

56. Each Respondent certifies individually that, to the best of its knowledge and belief, after thorough inquiry, it has not altered, mutilated, discarded, destroyed, or otherwise disposed of any Records (other than identical copies) relating to its potential liability regarding the Site since notification of potential liability by EPA or the State and that it has fully complied with any and all EPA and State requests for information regarding the Site pursuant to Sections 104(e) and 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) and 9622(e), and Section 3007 of RCRA, 42 U.S.C. § 6927, and state law.

#### **XIV. COMPLIANCE WITH OTHER LAWS**

57. Nothing in this Settlement limits Respondent's obligations to comply with the requirements of all applicable state and federal laws and regulations when performing the RI/FS. No local, state, or federal permit shall be required for any portion of the Work conducted entirely on-site (i.e., within the areal extent of contamination or in very close proximity to the contamination and necessary for implementation of the Work), including studies, if the action is selected and carried out in compliance with Section 121 of CERCLA, 42 U.S.C. § 9621. Where any portion of the Work that is not on-site requires a federal or state permit or approval, Respondents shall submit timely and complete applications and take all other actions necessary to obtain and to comply with all such permits or approvals. Respondents may seek relief under the provisions of Section XIX (Force Majeure) for any delay in the performance of the Work resulting from a failure to obtain, or a delay in obtaining, any permit or approval required for the Work, provided that they have submitted timely and complete applications and taken all other actions necessary to obtain all such permits or approvals. This Settlement is not, and shall not be construed to be, a permit issued pursuant to any federal or state statute or regulation.

#### **XV. EMERGENCY RESPONSE AND NOTIFICATION OF RELEASES**

58. **Emergency Response.** If any event occurs during performance of the Work that causes or threatens to cause a release of Waste Material on, at, or from the Site that either constitutes an emergency situation or that may present an immediate threat to public health or welfare or the environment, Respondents shall immediately take all appropriate action to prevent, abate, or minimize such release or threat of release. Respondents shall take these actions in accordance with all applicable provisions of this Settlement, including, but not limited to, the Health and Safety Plan. Respondents shall also immediately notify EPA's Project Coordinator or, in the event of his/her unavailability, the Regional Duty Officer at **[insert Regional spill phone number]** of the incident or Site conditions. In the event that Respondents fail to take appropriate response action as required by this Paragraph, and EPA takes such action instead, Respondents shall reimburse EPA for all costs of such response action not inconsistent with the NCP pursuant to Section XVI (Payment of Response Costs).

59. **Release Reporting.** Upon the occurrence of any event during performance of the Work that Respondents are required to report pursuant to Section 103 of CERCLA, 42 U.S.C. § 9603, or Section 304 of the Emergency Planning and Community Right-to-know Act (EPCRA), 42 U.S.C. § 11004, Respondents shall immediately orally notify EPA's Project Coordinator or, in the event of his/her unavailability, the Regional Duty Officer at **[insert Regional spill phone number]**, and the National Response Center at (800) 424-8802. This reporting requirement is in addition to, and not in lieu of, reporting under Section 103(c) of



CERCLA, 42 U.S.C. § 9603(c), and Section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. § 11004.

60. For any event covered under this Section, Respondents shall submit a written report to EPA within 7 days after the onset of such event, setting forth the action or event that occurred and the measures taken, and to be taken, to mitigate any release or threat of release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release or threat of release.

## **XVI. PAYMENT OF RESPONSE COSTS**

### **61. [Payment for Past Response Costs**

a. Within 30 days after the Effective Date, Respondents shall pay to EPA \$\_\_\_\_ for Past Response Costs. Respondents shall make payment to EPA by Fedwire Electronic Funds Transfer (EFT) to:

Federal Reserve Bank of New York  
ABA = 021030004  
Account = 68010727  
SWIFT address = FRNYUS33  
33 Liberty Street  
New York, NY 10045  
Field Tag 4200 of the Fedwire message should read “D 68010727 Environmental Protection Agency”

and shall reference Site/Spill ID Number \_\_\_\_\_ and the EPA docket number for this action.

**[NOTE: Regions may substitute the following for payment by Automated Clearinghouse (ACH) or for online payment:**

#### **For ACH payment:**

Respondents shall make payment to EPA by Automated Clearinghouse (ACH) to:

PNC Bank  
808 17<sup>th</sup> Street, NW  
Washington, DC 20074  
Contact – Jesse White 301-887-6548  
ABA = 051036706  
Transaction Code 22 - checking  
Environmental Protection Agency  
Account 310006  
CTX Format

and shall reference Site/Spill ID Number \_\_\_\_\_ and the EPA docket number for this action.

#### **For online payment:**

Respondents shall make payment at <https://www.pay.gov> to the U.S. EPA account in accordance with instructions to be provided to Respondents by EPA.]

**[NOTE: If Respondents have difficulty making EFT, ACH, or online payments, you may substitute the following:** Respondents shall make payment by official bank check made payable to “EPA Hazardous Substance Superfund.” Each check, or a letter accompanying each check, shall identify the name and address of the party(ies) making payment, the Site name, Site/Spill ID Number \_\_\_\_, and the EPA docket number for this action, and shall be sent to:

U.S. Environmental Protection Agency  
Superfund Payments  
Cincinnati Finance Center  
PO Box 979076  
St. Louis, MO 63197-9000]

b. At the time of payment, Respondents shall send notice that payment has been made to **[insert name and address of EPA’s Project Coordinator or other receiving official in Region]**, and to the EPA Cincinnati Finance Office by email at [cinwd\\_acctsreceivable@epa.gov](mailto:cinwd_acctsreceivable@epa.gov), or by mail to

EPA Cincinnati Finance Office  
26 W. Martin Luther King Drive  
Cincinnati, Ohio 45268

Such notice shall reference Site/Spill ID Number \_\_\_\_ and the EPA docket number for this action.

**[NOTE ON SPECIAL ACCOUNTS: The Agreement should specify whether payments for Past Response Costs (if any) and Future Response Costs should be deposited in the EPA Hazardous Substance Superfund or in a site-specific special account within the EPA Hazardous Substance Superfund, or should be split between the Superfund and the Special Account (and should specify the split).]**

c. **Deposit of Past Response Costs Payments.** **[Insert one of the following three sentences here.]** [The total amount to be paid by Respondents pursuant to Paragraph 61.a shall be deposited by EPA in the EPA Hazardous Substance Superfund.] [The total amount to be paid by Respondents pursuant to Paragraph 61.a shall be deposited by EPA in the **[Site name]** Special Account to be retained and used to conduct or finance response actions at or in connection with the Site, or to be transferred by EPA to the EPA Hazardous Substance Superfund.] [Of the total amount to be paid by Respondents pursuant to Paragraph 61.a, [“\$ \_\_\_\_” or “\_\_\_\_%”] shall be deposited by EPA in the EPA Hazardous Substance Superfund and [“\$ \_\_\_\_” or “\_\_\_\_%”] shall be deposited by EPA in the **[Site name]** Special Account to be retained and used to conduct or finance response actions at or in connection with the Site, or to be transferred by EPA to the EPA Hazardous Substance Superfund.]

62. **Payments for Future Response Costs.** Respondents shall pay to EPA all Future Response Costs not inconsistent with the NCP.

**[NOTE ON USE OF PREPAID FUTURE RESPONSE COSTS SPECIAL ACCOUNTS: Keep Paragraphs 62.c (Periodic Bills) and 62.d (Deposit of Future Response Costs Payments) in all Settlements. If Respondents will be prepaying any part of EPA's Future Response Costs, also keep Paragraphs 62.a (Prepayment of Future Response Costs), 62.b (Shortfall Payments) and 62.e (Unused Amount). (Note that Paragraph 62.b (Shortfall Payments) is an optional provision for replenishment of the Future Response Costs Special Account in the event of a shortfall in the prepayment.) For an explanation of prepaid accounts, including when prepayment is appropriate, see "Additional Guidance on Prepayment of Oversight Costs and Special Accounts" (Dec. 22, 2006), available at <https://www2.epa.gov/enforcement/guidance-prepayment-oversight-costs-and-special-accounts>.]**

a. **[Prepayment of Future Response Costs.** Within 30 days after the Effective Date, Respondents shall pay to EPA \$ \_\_\_\_\_ as a prepayment of **[if the Paragraph 62.b (Shortfall Payment) optional provision for replenishment is used substitute: as an initial payment toward]** Future Response Costs. Respondents shall make payment in accordance with Paragraphs 61.a and 61.b (Payment for Past Response Costs). The total amount paid shall be deposited by EPA in the **[Site name]** Future Response Costs Special Account. These funds shall be retained and used by EPA to conduct or finance future response actions at or in connection with the Site. **[NOTE: If Past Response Costs are not being paid, insert Paragraphs 61.a and 61.b payment instructions here.]**

**[NOTE: Paragraph 62.b (Shortfall Payment) is an optional provision for replenishment of the Future Response Costs Special Account in the event of a shortfall in the prepayment.]**

b. **Shortfall Payment.** If at any time prior to the date EPA sends Respondents the first bill under Paragraph 62.c (Periodic Bill), or one year after the Effective Date, whichever is earlier, the balance in the **[Site name]** Future Response Costs Special Account falls below \$ \_\_\_\_\_, EPA will so notify Respondents. Respondents shall, within 30 days after receipt of such notice, pay \$ \_\_\_\_\_ to EPA. Payment shall be made in accordance with Paragraphs 61.a and 61.b (Payment for Past Response Costs). The amounts paid shall be deposited by EPA in the **[Site name]** Future Response Costs Special Account. These funds shall be retained and used by EPA to conduct or finance future response actions at or in connection with the Site.

c. **Periodic Bill.** On a periodic basis, EPA will send Respondents a bill requiring payment that includes a **[insert name of standard Regionally-prepared cost summary]**, which includes direct and indirect costs incurred by EPA, its contractors, subcontractors, and the United States Department of Justice. Respondents shall make all payments within 30 days after Respondents' receipt of each bill requiring payment, except as otherwise provided in Paragraph 64 (Contesting Future Response Costs), and in accordance with Paragraphs 61.a and 61.b (Payments for Past Response Costs). **[NOTE: If neither Past Response Costs nor Prepaid Future Response Costs are being paid, insert Paragraphs 61.a and 61.b payment instructions here.]**

d. **Deposit of Future Response Costs Payments.** **[Insert one of the following three sentences here.]** [The total amount to be paid by Respondents pursuant to

Paragraph 62.c (Periodic Bill) shall be deposited by EPA in the EPA Hazardous Substance Superfund.] [The total amount to be paid by Respondents pursuant to Paragraph 62.c (Periodic Bill) shall be deposited by EPA in the [Site name] Special Account to be retained and used to conduct or finance response actions at or in connection with the Site, or to be transferred by EPA to the EPA Hazardous Substance Superfund, provided, however, that EPA may deposit a Future Response Costs payment directly into the EPA Hazardous Substance Superfund if, at the time the payment is received, EPA estimates that the [Site name] Special Account balance is sufficient to address currently anticipated future response actions to be conducted or financed by EPA at or in connection with the Site.] [Of the total amount to be paid by Respondents pursuant to Paragraph 62.c (Periodic Bill), [“\$ \_\_\_\_\_” or “\_\_\_\_\_%”] shall be deposited by EPA in the EPA Hazardous Substance Superfund and [“\$ \_\_\_\_\_” or “\_\_\_\_\_%”] shall be deposited by EPA in the [Site name] Special Account to be retained and used to conduct or finance response actions at or in connection with the Site, or to be transferred by EPA to the EPA Hazardous Substance Superfund, provided, however, that EPA may deposit the entire amount of the Future Response Cost payment directly into the EPA Hazardous Substance Superfund if, at the time the payment is received, EPA estimates that the [Site name] Special Account balance is sufficient to address currently anticipated future response actions to be conducted or financed by EPA at or in connection with the Site.] **[If second or third sentence is used:** Any decision by EPA to deposit a Future Response Costs payment directly into the EPA Hazardous Substance Superfund for this reason shall not be subject to challenge by Respondents pursuant to the dispute resolution provisions of this Settlement or in any other forum.]

e. **Unused Amount.** After EPA issues the Notice of Completion of Work pursuant to Paragraph 120 and a final accounting of the [Site name] Future Response Costs Special Account (including crediting Respondents for any amounts received under Paragraphs 62.a (Prepayment of Future Response Costs) [, 62.b (Shortfall Payment),] or 62.c (Periodic Bill)), EPA will **[choose one or more of the following three clauses:** “offset the next<sup>7</sup> Future Response Costs bill by the unused amount paid by Respondents pursuant to Paragraphs 62.a (Prepayment of Future Response Costs) [, 62.b (Shortfall Payment),] or 62.c (Periodic Bill);” “apply any unused amount paid by Respondents pursuant to Paragraphs 62.a (Prepayment of Future Response Costs) [, 62.b (Shortfall Payment),] or 62.c (Periodic Bill) to any other unreimbursed response costs or response actions remaining at the Site;” or “remit and return to Respondents any unused amount of the funds paid by Respondents pursuant to Paragraphs 62.a (Prepayment of Future Response Costs) [, 62.b (Shortfall Payment),] or 62.c (Periodic Bill).”] **[If the second clause is chosen, insert:** Any decision by EPA to apply unused amounts to unreimbursed response costs or response actions remaining at the Site shall not be subject to challenge by Respondents pursuant to the dispute resolution provisions of this Settlement or in any other forum.]

63. **Interest.** In the event that any payment for **[if applicable:** Past Response Costs or] Future Response Costs is not made by the date required, Respondents shall pay Interest on the unpaid balance. **[If applicable:** The Interest on [Past Response Costs] [and] [prepaid Future Response Cost] shall begin to accrue on the Effective Date. The Interest on **[if prepaid Future Response Costs:** all subsequent] Future Response Costs shall begin to accrue on the date of the bill **[if prepaid Future Response Costs:** or on the date of the prepayment shortfall notice

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<sup>7</sup> If the RI/FS is complete at the time of the final accounting, in the “offset” clause, use “final” instead of “next.”

pursuant to Paragraph 62.b (Shortfall Payment)]. The Interest shall accrue through the date of Respondents' payment. Payments of Interest made under this Paragraph shall be in addition to such other remedies or sanctions available to the United States by virtue of Respondents' failure to make timely payments under this Section, including but not limited to, payment of stipulated penalties pursuant to Section XX (Stipulated Penalties).

64. **Contesting Future Response Costs.** Respondents may initiate the procedures of Section XVIII (Dispute Resolution) regarding payment of any Future Response Costs billed under Paragraph 62 (Payments for Future Response Costs) if they determine that EPA has made a mathematical error or included a cost item that is not within the definition of Future Response Costs, or if they believe EPA incurred excess costs as a direct result of an EPA action that was inconsistent with a specific provision or provisions of the NCP. To initiate such a dispute, Respondents shall submit a Notice of Dispute in writing to EPA's Project Coordinator within 30 days after receipt of the bill. Any such Notice of Dispute shall specifically identify the contested Future Response Costs and the basis for objection. If Respondents submit a Notice of Dispute, Respondents shall within the 30-day period, also as a requirement for initiating the dispute, (a) pay all uncontested Future Response Costs to EPA in the manner described in Paragraph 62, and (b) establish, in a duly chartered bank or trust company, an interest-bearing escrow account that is insured by the Federal Deposit Insurance Corporation (FDIC) and remit to that escrow account funds equivalent to the amount of the contested Future Response Costs. Respondents shall send to EPA's Project Coordinator a copy of the transmittal letter and check paying the uncontested Future Response Costs, and a copy of the correspondence that establishes and funds the escrow account, including, but not limited to, information containing the identity of the bank and bank account under which the escrow account is established as well as a bank statement showing the initial balance of the escrow account. If EPA prevails in the dispute, within 5 days after the resolution of the dispute, Respondents shall pay the sums due (with accrued interest) to EPA in the manner described in Paragraph 62. If Respondents prevail concerning any aspect of the contested costs, Respondents shall pay that portion of the costs (plus associated accrued interest) for which they did not prevail to EPA in the manner described in Paragraph 62. Respondents shall be disbursed any balance of the escrow account. The dispute resolution procedures set forth in this Paragraph in conjunction with the procedures set forth in Section XVIII (Dispute Resolution) shall be the exclusive mechanisms for resolving disputes regarding Respondents' obligation to reimburse EPA for its Future Response Costs.

**[NOTE: Include the following section in RI/FS AOCs for Superfund Alternative Approach settlements.]**

## **XVII. [NATURAL RESOURCE DAMAGES]**

65. [\_\_\_\_\_. For the purposes of Section 113(g)(1) of CERCLA, the Parties agree that, upon the Effective Date of this Settlement for performance of an RI/FS at the Site, remedial action under CERCLA shall be deemed to be scheduled and an action for damages (as defined in 42 U.S.C. § 9601(6)) must be commenced within 3 years after the completion of the remedial action **[if RI/FS is being performed for an operable unit (OU) of a multi-OU site, continue with: for the last operable unit at the Site.]**

## **XVIII. DISPUTE RESOLUTION**

**[NOTE: The Regions should develop a record for the dispute and its resolution.]**

66. Unless otherwise expressly provided for in this Settlement, the dispute resolution procedures of this Section shall be the exclusive mechanism for resolving disputes arising under this Settlement. The Parties shall attempt to resolve any disagreements concerning this Settlement expeditiously and informally.

67. **Informal Dispute Resolution.** If Respondents object to any EPA action taken pursuant to this Settlement, including billings for Future Response Costs, they shall send EPA a written Notice of Dispute describing the objection(s) within \_\_\_ days after such action. EPA and Respondents shall have \_\_\_ days from EPA's receipt of Respondents' Notice of Dispute to resolve the dispute through informal negotiations (the "Negotiation Period"). The Negotiation Period may be extended at the sole discretion of EPA. Any agreement reached by the Parties pursuant to this Section shall be in writing and shall, upon signature by the Parties, be incorporated into and become an enforceable part of this Settlement.

68. **Formal Dispute Resolution.** If the Parties are unable to reach an agreement within the Negotiation Period, Respondents shall, within [20] days after the end of the Negotiation Period, submit a statement of position to EPA's Project Coordinator. EPA may, within [20] days thereafter, submit a statement of position. Thereafter, an EPA management official at the [insert Region-specific] level or higher will issue a written decision on the dispute to Respondents. EPA's decision shall be incorporated into and become an enforceable part of this Settlement. Respondents shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or with EPA's decision, whichever occurs.

69. Except as provided in Paragraph 64 (Contesting Future Response Costs) or as agreed by EPA, the invocation of formal dispute resolution procedures under this Section does not extend, postpone, or affect in any way any obligation of Respondents under this Settlement. Except as provided in Paragraph 79, stipulated penalties with respect to the disputed matter shall continue to accrue but payment shall be stayed pending resolution of the dispute. Notwithstanding the stay of payment, stipulated penalties shall accrue from the first day of noncompliance with any applicable provision of this Settlement. In the event that Respondents do not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section XX (Stipulated Penalties).

## **XIX. FORCE MAJEURE**

70. "Force Majeure" for purposes of this Settlement, is defined as any event arising from causes beyond the control of Respondents, of any entity controlled by Respondents, or of Respondents' contractors that delays or prevents the performance of any obligation under this Settlement despite Respondents' best efforts to fulfill the obligation. The requirement that Respondents exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential force majeure and best efforts to address the effects of any potential force majeure (a) as it is occurring and (b) following the potential force majeure such that the delay and any adverse effects of the delay are minimized to the greatest extent possible. "Force

majeure” does not include financial inability to complete the Work or increased cost of performance.

71. If any event occurs or has occurred that may delay the performance of any obligation under this Settlement, Respondents shall notify EPA’s Project Coordinator [**replace with OSC or RPM, as appropriate, and adjust the remainder of this paragraph to be consistent**] orally or, in his or her absence, the alternate EPA Project Coordinator, or, in the event both of EPA’s designated representatives are unavailable, the Director of the Waste Management Division, EPA Region \_\_, within [**insert period of time**] of when Respondents first knew that the event might cause a delay. Within \_\_ days thereafter, Respondents shall provide in writing to EPA an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Respondents’ rationale for attributing such delay to a force majeure; and a statement as to whether, in the opinion of Respondents, such event may cause or contribute to an endangerment to public health or welfare, or the environment. Respondents shall include with any notice all available documentation supporting their claim that the delay was attributable to a force majeure. Respondents shall be deemed to know of any circumstance of which Respondents, any entity controlled by Respondents, or Respondents’ contractors knew or should have known. Failure to comply with the above requirements regarding an event shall preclude Respondents from asserting any claim of force majeure regarding that event, provided, however, that if EPA, despite the late or incomplete notice, is able to assess to its satisfaction whether the event is a force majeure under Paragraph 70 and whether Respondents have exercised their best efforts under Paragraph 70, EPA may, in its unreviewable discretion, excuse in writing Respondents’ failure to submit timely or complete notices under this Paragraph.

72. If EPA agrees that the delay or anticipated delay is attributable to a force majeure, the time for performance of the obligations under this Settlement that are affected by the force majeure will be extended by EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the force majeure shall not, of itself, extend the time for performance of any other obligation. If EPA does not agree that the delay or anticipated delay has been or will be caused by a force majeure, EPA will notify Respondents in writing of its decision. If EPA agrees that the delay is attributable to a force majeure, EPA will notify Respondents in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure.

73. If Respondents elect to invoke the dispute resolution procedures set forth in Section XVIII (Dispute Resolution), they shall do so no later than 15 days after receipt of EPA’s notice. In any such proceeding, Respondents shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a force majeure, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that Respondents complied with the requirements of Paragraphs 70 and 71. If Respondents carry this burden, the delay at issue shall be deemed not to be a violation by Respondents of the affected obligation of this Settlement identified to EPA.

74. The failure by EPA to timely complete any obligation under the Settlement is not a violation of the Settlement, provided, however, that if such failure prevents Respondents from meeting one or more deadlines under the Settlement, Respondents may seek relief under this Section.

## **XX. STIPULATED PENALTIES**

75. Respondents shall be liable to EPA for stipulated penalties in the amounts set forth in Paragraphs 76.a and 77 for failure to comply with the obligations specified in Paragraphs 76.b and 77, unless excused under Section XIX (Force Majeure). “Comply” as used in the previous sentence includes compliance by Respondents with all applicable requirements of this Settlement, within the deadlines established under this Settlement.

### **76. Stipulated Penalty Amounts: Payments, Financial Assurance, Major Deliverables, and Other Milestones**

a. The following stipulated penalties shall accrue per violation per day for any noncompliance with any obligation identified in Paragraph 76.b:

<b>Penalty Per Violation Per Day</b>	<b>Period of Noncompliance</b>
\$ _____	1st through 14th day
\$ _____	15th through 30th day
\$ _____	31st day and beyond

#### **b. Obligations**

(1) Payment of any amount due under Section XVI (Payment of Response Costs).

(2) Establishment and maintenance of financial assurance in accordance with Section XXVIII (Financial Assurance).

(3) Establishment of an escrow account to hold any disputed Future Response Costs under Paragraph 64 (Contesting Future Response Costs).

(4) [Continue list of major deliverables and other milestones.]

77. **Stipulated Penalty Amounts: Other Deliverables.** The following stipulated penalties shall accrue per violation per day for failure to submit timely or adequate deliverables required by this Settlement, other than those specified in Paragraph 76.a:

<b>Penalty Per Violation Per Day</b>	<b>Period of Noncompliance</b>
\$ _____	1st through 14th day
\$ _____	15th through 30th day
\$ _____	31st day and beyond



78. In the event that EPA assumes performance of a portion or all of the Work pursuant to Paragraph 89 (Work Takeover), Respondents shall be liable for a stipulated penalty in the amount of \_\_\_\_\_. **[Include the following sentence if Section XXVIII (Financial Assurance) is included in the Settlement:** Stipulated penalties under this Paragraph are in addition to the remedies available to EPA under Paragraphs 89 (Work Takeover) and 114 (Access to Financial Assurance).]

79. All penalties shall begin to accrue on the day after the complete performance is due or the day a violation occurs and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity. Penalties shall continue to accrue during any dispute resolution period, and shall be paid within 15 days after the agreement or the receipt of EPA's decision. However, stipulated penalties shall not accrue: (a) with respect to a deficient submission under Section IX (Submission and Approval of Deliverables), during the period, if any, beginning on the 31st day after EPA's receipt of such submission until the date that EPA notifies Respondents of any deficiency; and (b) with respect to a decision by the EPA Management Official at the [insert Region specific] level or higher, under Paragraph 68 (Formal Dispute Resolution), during the period, if any, beginning on the 21st day after the Negotiation Period begins until the date that the EPA Management Official issues a final decision regarding such dispute. Nothing in this Settlement shall prevent the simultaneous accrual of separate penalties for separate violations of this Settlement.

80. Following EPA's determination that Respondents have failed to comply with a requirement of this Settlement, EPA may give Respondents written notification of the failure and describe the noncompliance. EPA may send Respondents a written demand for the payment of the penalties. However, penalties shall accrue as provided in the preceding Paragraph regardless of whether EPA has notified Respondents of a violation.

81. All penalties accruing under this Section shall be due and payable to EPA within 30 days after Respondents' receipt from EPA of a demand for payment of the penalties, unless Respondents invoke the Dispute Resolution procedures under Section XVIII (Dispute Resolution) within the 30-day period. All payments to EPA under this Section shall indicate that the payment is for stipulated penalties and shall be made in accordance with Paragraph 62 (Payments for Future Response Costs).

82. If Respondents fail to pay stipulated penalties when due, Respondents shall pay Interest on the unpaid stipulated penalties as follows: (a) if Respondents have timely invoked dispute resolution such that the obligation to pay stipulated penalties has been stayed pending the outcome of dispute resolution, Interest shall accrue from the date stipulated penalties are due pursuant to Paragraph 79 until the date of payment; and (b) if Respondents fail to timely invoke dispute resolution, Interest shall accrue from the date of demand under Paragraph 81 until the date of payment. If Respondents fail to pay stipulated penalties and Interest when due, the United States may institute proceedings to collect the penalties and Interest.

83. The payment of penalties and Interest, if any, shall not alter in any way Respondents' obligation to complete performance of the Work required under this Settlement.

84. Nothing in this Settlement shall be construed as prohibiting, altering, or in any way limiting the ability of EPA to seek any other remedies or sanctions available by virtue of Respondents' violation of this Settlement or of the statutes and regulations upon which it is based, including, but not limited to, penalties pursuant to Section 122(l) of CERCLA, 42 U.S.C. § 9622(l), and punitive damages pursuant to Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3), provided, however, that EPA shall not seek civil penalties pursuant Section 122(l) of CERCLA or punitive damages pursuant to Section 107(c)(3) of CERCLA for any violation for which a stipulated penalty is provided in this Settlement, except in the case of willful violation of this Settlement or in the event that EPA assumes performance of a portion or all of the Work pursuant to Paragraph 89 (Work Takeover).

**[NOTE: A provision for EPA to elect between seeking stipulated and statutory penalties for a particular Settlement violation may be substituted in the paragraph above in appropriate cases by changing “for any violation for which a stipulated penalty is provided in this Settlement, except in the case of a willful violation” to “for any violation for which a stipulated penalty is collected pursuant to this Settlement.”]**

85. Notwithstanding any other provision of this Section, EPA may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Settlement.

## **XXI. COVENANTS BY EPA**

86. Except as provided in Section XXII (Reservations of Rights by EPA), EPA covenants not to sue or to take administrative action against Respondents pursuant to Sections 106 and 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a), for the Work **[if addressed: , Past Response Costs,]** and Future Response Costs. These covenants shall take effect upon the Effective Date. These covenants are conditioned upon the complete and satisfactory performance by Respondents of their obligations under this Settlement. These covenants extend only to Respondents and do not extend to any other person.

## **XXII. RESERVATIONS OF RIGHTS BY EPA**

87. Except as specifically provided in this Settlement, nothing in this Settlement shall limit the power and authority of EPA or the United States to take, direct, or order all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants, or contaminants, or hazardous or solid waste on, at, or from the Site. Further, nothing in this Settlement shall prevent EPA from seeking legal or equitable relief to enforce the terms of this Settlement, from taking other legal or equitable action as it deems appropriate and necessary, or from requiring Respondents in the future to perform additional activities pursuant to CERCLA or any other applicable law.

88. The covenant not to sue set forth in Section XXI (Covenants by EPA) above does not pertain to any matters other than those expressly identified therein. EPA reserves, and this Settlement is without prejudice to, all rights against Respondents with respect to all other matters, including, but not limited to:

- Settlement;
- a. liability for failure by Respondents to meet a requirement of this Settlement;
  - b. liability for costs not included within the definition[s] of **[if addressed: Past Response Costs or] Future Response Costs**;
  - c. liability for performance of response action other than the Work;
  - d. criminal liability;
  - e. liability for violations of federal or state law that occur during or after implementation of the Work;
  - f. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;
  - g. liability arising from the past, present, or future disposal, release or threat of release of Waste Materials outside of the Site; and
  - h. liability for costs incurred or to be incurred by the Agency for Toxic Substances and Disease Registry related to the Site not paid as Future Response Costs under this Settlement.

#### 89. **Work Takeover**

- a. In the event EPA determines that Respondents: (1) have ceased implementation of any portion of the Work; (2) are seriously or repeatedly deficient or late in their performance of the Work; or (3) are implementing the Work in a manner that may cause an endangerment to human health or the environment, EPA may issue a written notice (“Work Takeover Notice”) to Respondents. Any Work Takeover Notice issued by EPA (which writing may be electronic) will specify the grounds upon which such notice was issued and will provide Respondents a period of 10 days within which to remedy the circumstances giving rise to EPA’s issuance of such notice.
- b. If, after expiration of the 10-day notice period specified in Paragraph 89.a, Respondents have not remedied to EPA’s satisfaction the circumstances giving rise to EPA’s issuance of the relevant Work Takeover Notice, EPA may at any time thereafter assume the performance of all or any portion(s) of the Work as EPA deems necessary (“Work Takeover”). EPA will notify Respondents in writing (which writing may be electronic) if EPA determines that implementation of a Work Takeover is warranted under this Paragraph 89.b. **[Include the following sentence if Section XXVIII (Financial Assurance) is included in the Settlement: Funding of Work Takeover costs is addressed under Paragraph 114 (Access to Financial Assurance).]**
- c. Respondents may invoke the procedures set forth in Section XVIII (Dispute Resolution) to dispute EPA’s implementation of a Work Takeover under Paragraph 89.b. However, notwithstanding Respondents’ invocation of such dispute resolution procedures, and during the pendency of any such dispute, EPA may in its sole discretion commence and

continue a Work Takeover under Paragraph 89.b until the earlier of (1) the date that Respondents remedy, to EPA's satisfaction, the circumstances giving rise to EPA's issuance of the relevant Work Takeover Notice, or (2) the date that a written decision terminating such Work Takeover is rendered in accordance with Paragraph 68 (Formal Dispute Resolution).

d. Notwithstanding any other provision of this Settlement, EPA retains all authority and reserves all rights to take any and all response actions authorized by law.

### **XXIII. COVENANTS BY RESPONDENTS**

90. Respondents covenant not to sue and agree not to assert any claims or causes of action against the United States, or its contractors or employees, with respect to the Work, [Past Response Costs,] Future Response Costs, or this Settlement, including, but not limited to:

a. any direct or indirect claim for reimbursement from the EPA Hazardous Substance Superfund through Sections 106(b)(2), 107, 111, 112, or 113 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9607, 9611, 9612, or 9613, or any other provision of law;

b. any claims under Sections 107 and 113 of CERCLA, Section 7002(a) of RCRA, 42 U.S.C. § 6972(a), or state law regarding the Work, **[if addressed: , Past Response Costs,]** Future Response Costs, and this Settlement; [or]

c. any claim arising out of response actions at or in connection with the Site, including any claim under the United States Constitution, the [State] Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, or at common law [; or]

**[NOTE: If the Settlement contains a Future Response Cost prepayment provision under which Respondents may receive a return of unused amounts under option 3 of Paragraph 62.e, include Paragraph 90.d.]**

d. [any direct or indirect claim for return of unused amounts from the **[Site name]** Future Response Costs Special Account, except for unused amounts that EPA determines shall be returned to Respondents in accordance with Paragraph 62.e (Unused Amount).]

91. Except as provided in Paragraph 95 (Waiver of Claims by Respondents) these covenants not to sue shall not apply in the event the United States brings a cause of action or issues an order pursuant to the reservations set forth in Section XXII (Reservations of Rights by EPA), other than in Paragraph 88.a (liability for failure to meet a requirement of the Settlement), 88.d (criminal liability), or 88.e (liability for violations of federal or state law), but only to the extent that Respondents' claims arise from the same response action, response costs, or damages that the United States is seeking pursuant to the applicable reservation.

92. Nothing in this Agreement shall be deemed to constitute approval or preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).

93. Respondents reserve, and this Settlement is without prejudice to, claims against the United States, subject to the provisions of Chapter 171 of Title 28 of the United States Code, and brought pursuant to any statute other than CERCLA or RCRA and for which the waiver of sovereign immunity is found in a statute other than CERCLA or RCRA, for money damages for injury or loss of property or personal injury or death caused by the negligent or wrongful act or omission of any employee of the United States, as that term is defined in 28 U.S.C. § 2671, while acting within the scope of his or her office or employment under circumstances where the United States, if a private person, would be liable to the claimant in accordance with the law of the place where the act or omission occurred. However, the foregoing shall not include any claim based on EPA's selection of response actions, or the oversight or approval of Respondents' deliverables or activities.

**[NOTE: The following provision should be included if the Settlement includes removal activities other than the RI/FS.]**

94. [Respondents agree not to seek judicial review of the final rule listing the Site on the NPL based on a claim that changed site conditions that resulted from the performance of the Work in any way affected the basis for listing the Site.]

**95. Waiver of Claims by Respondents**

a. Respondents agree not to assert any claims and to waive all claims or causes of action (including but not limited to claims or causes of action under Sections 107(a) and 113 of CERCLA) that they may have:

(1) **De Micromis Waiver.** For all matters relating to the Site against any person where the person's liability to Respondents with respect to the Site is based solely on having arranged for disposal or treatment, or for transport for disposal or treatment, of hazardous substances at the Site, or having accepted for transport for disposal or treatment of hazardous substances at the Site, if all or part of the disposal, treatment, or transport occurred before April 1, 2001, and the total amount of material containing hazardous substances contributed by such person to the Site was less than 110 gallons of liquid materials or 200 pounds of solid materials;

**[NOTE: Use next paragraph if there is MSW at the Site.]**

(2) **[MSW Waiver.** For all matters relating to the Site against any person where the person's liability to Respondents with respect to the Site is based solely on having arranged for disposal or treatment, or for transport for disposal or treatment, of MSW at the Site, if the volume of MSW disposed, treated, or transported by such person to the Site did not exceed 0.2 percent of the total volume of waste at the Site; and]

**[NOTE: Use the next paragraph if there are known or potential *de minimis* and/or ability to pay (ATP) parties at the Site. Include bracketed reference to *de minimis* party settlement, ATP party settlement, or both as appropriate given Site facts. Use the bracketed "[or in the future enters]" if there are known or potential *de minimis* and/or**

ATP PRPs with whom the United States has not yet settled. Note that inclusion of the future component of the waiver does not affect Respondents' right to oppose entry of any such future settlement through the public comment process and does not have any effect unless and until the United States enters into any such future settlement. The scope of the waiver should generally track the scope of the "matters addressed" in the contribution provision of the concluded *de minimis* or ATP settlement. Normally, this means that the scope will be "response costs" as included below. However, if the settlement included natural resource damages, also include "natural resource damages and assessment costs," and if the settlement was not site-wide, limit the scope as appropriate. Also, if the "[or in the future enters]" bracket is used and the scope of the future settlement is likely to be different from the past settlement(s), redraft as necessary.]

(3) [De Minimis/Ability to Pay Waiver. For response costs relating to the Site against any person that has entered [or in the future enters] into [a final CERCLA § 122(g) *de minimis* settlement] [, or] [a final settlement based on limited ability to pay] [,] with EPA with respect to the Site.]

**b. Exceptions to Waiver[s]**

(1) The waiver[s] under this Paragraph 95 shall not apply with respect to any defense, claim, or cause of action that a Respondent may have against any person otherwise covered by such waiver[s] if such person asserts a claim or cause of action relating to the Site against such Respondent.

**[NOTE: If a Respondent asserts that it has a claim against a PRP within the scope of the waiver[s] that is unrelated to the PRP's CERCLA liability at the Site, e.g., a claim for contractual indemnification, add an exception for such claim, such as the following:**

(2) The waiver[s] under this Paragraph 95 shall not apply to Respondent [insert name]'s contractual indemnification claim against [insert name].]

(3) The waiver under Paragraph 95.a(1) (De Minimis Waiver) shall not apply to any claim or cause of action against any person otherwise covered by such waiver if EPA determines that: (i) the materials containing hazardous substances contributed to the Site by such person contributed significantly or could contribute significantly, either individually or in the aggregate, to the cost of the response action or natural resource restoration at the Site; or (ii) such person has failed to comply with any information request or administrative subpoena issued pursuant to Section 104(e) or 122(e) of CERCLA, 42 U.S.C. § 9604(e) or 9622(e), or Section 3007 of RCRA, 42 U.S.C. § 6927, or has impeded or is impeding, through action or inaction, the performance of a response action or natural resource restoration with respect to the Site; or if (iii) such person has been convicted of a criminal violation for the conduct to which the waiver would apply and that conviction has not been vitiated on appeal or otherwise.

(4) [The waiver under Paragraph 95.a(2) (MSW Waiver) shall not apply to any claim or cause of action against any person otherwise covered by such waiver if EPA determines that: (i) the materials containing hazardous substances contributed to the Site by such person contributed significantly or could contribute significantly, either individually or in the aggregate, to the cost of the response action or natural resource restoration at the Site; or (ii) such person has failed to comply with any information request or administrative subpoena issued pursuant to Section 104(e) or 122(e) of CERCLA, 42 U.S.C. § 9604(e) or 9622(e), or Section 3007 of RCRA, 42 U.S.C. § 6927, or has impeded or is impeding, through action or inaction, the performance of a response action or natural resource restoration with respect to the Site.]

#### **XXIV. OTHER CLAIMS**

96. By issuance of this Settlement, the United States and EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondents. The United States or EPA shall not be deemed a party to any contract entered into by Respondents or their directors, officers, employees, agents, successors, representatives, assigns, contractors, or consultants in carrying out actions pursuant to this Settlement.

97. Except as expressly provided in Paragraphs 95 (Waiver of Claims by Respondents) and Section XXI (Covenants by EPA), nothing in this Settlement constitutes a satisfaction of or release from any claim or cause of action against Respondents or any person not a party to this Settlement, for any liability such person may have under CERCLA, other statutes, or common law, including but not limited to any claims of the United States for costs, damages, and interest under Sections 106 and 107 of CERCLA, 42 U.S.C. §§ 9606 and 9607.

98. No action or decision by EPA pursuant to this Settlement shall give rise to any right to judicial review, except as set forth in Section 113(h) of CERCLA, 42 U.S.C. § 9613(h).

#### **XXV. EFFECT OF SETTLEMENT/CONTRIBUTION**

99. Except as provided in Paragraphs 95 (Waiver of Claims by Respondents), nothing in this Settlement shall be construed to create any rights in, or grant any cause of action to, any person not a Party to this Settlement. Except as provided in Section XXIII (Covenants by Respondents), each of the Parties expressly reserves any and all rights (including, but not limited to, pursuant to Section 113 of CERCLA, 42 U.S.C. § 9613), defenses, claims, demands, and causes of action which each Party may have with respect to any matter, transaction, or occurrence relating in any way to the Site against any person not a Party hereto. Nothing in this Settlement diminishes the right of the United States, pursuant to Section 113(f)(2) and (3) of CERCLA, 42 U.S.C. § 9613(f)(2)-(3), to pursue any such persons to obtain additional response costs or response action and to enter into settlements that give rise to contribution protection pursuant to Section 113(f)(2).

100. The Parties agree that this Settlement constitutes an administrative settlement pursuant to which each Respondent has, as of the Effective Date, resolved liability to the United States within the meaning of Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C.

§§ 9613(f)(2) and 9622(h)(4), and is entitled, as of the Effective Date, to protection from contribution actions or claims as provided by Sections 113(f)(2) and 122(h)(4) of CERCLA, or as may be otherwise provided by law, for the “matters addressed” in this Settlement. The “matters addressed” in this Settlement are the Work **[if addressed: Past Response Costs,]** and Future Response Costs.

101. The Parties further agree that this Settlement constitutes an administrative settlement pursuant to which each Respondent has, as of the Effective Date, resolved liability to the United States within the meaning of Section 113(f)(3)(B) of CERCLA, 42 U.S.C. § 9613(f)(3)(B).

102. Each Respondent shall, with respect to any suit or claim brought by it for matters related to this Settlement, notify EPA in writing no later than 60 days prior to the initiation of such suit or claim. Each Respondent also shall, with respect to any suit or claim brought against it for matters related to this Settlement, notify EPA in writing within 10 days after service of the complaint or claim upon it. In addition, each Respondent shall notify EPA within 10 days after service or receipt of any Motion for Summary Judgment and within 10 days after receipt of any order from a court setting a case for trial, for matters related to this Settlement.

103. In any subsequent administrative or judicial proceeding initiated by EPA, or by the United States on behalf of EPA, for injunctive relief, recovery of response costs, or other relief relating to the Site, Respondents shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim-splitting, or other defenses based upon any contention that the claims raised in the subsequent proceeding were or should have been brought in the instant case; provided, however, that nothing in this Paragraph affects the enforceability of the covenant by EPA set forth in Section XXI (Covenants By EPA).

**[NOTE: Include Paragraph 104 if Past Response Costs are being paid under the Settlement.]**

104. [Effective upon signature of this Settlement by a Respondent, such Respondent agrees that the time period commencing on the date of its signature and ending on the date EPA receives from such Respondent the payment(s) required by Paragraphs 61 (Payment for Past Response Costs) and, if any, Section XX (Stipulated Penalties) shall not be included in computing the running of any statute of limitations potentially applicable to any action brought by the United States related to the “matters addressed” as defined in Paragraph 100 and that, in any action brought by the United States related to the “matters addressed,” such Respondent will not assert, and may not maintain, any defense or claim based upon principles of statute of limitations, waiver, laches, estoppel, or other defense based on the passage of time during such period. If EPA gives notice to Respondents that it will not make this Settlement effective, the statute of limitations shall begin to run again commencing 90 days after the date such notice is sent by EPA.]



## **XXVI. INDEMNIFICATION**

105. The United States does not assume any liability by entering into this Settlement or by virtue of any designation of Respondents as EPA's authorized representatives under Section 104(e) of CERCLA, 42 U.S.C. § 9604(e), and 40 C.F.R. § 300.400(d)(3). Respondents shall indemnify, save, and hold harmless the United States, its officials, agents, employees, contractors, subcontractors, and representatives for or from any and all claims or causes of action arising from, or on account of, negligent or other wrongful acts or omissions of Respondents, their officers, directors, employees, agents, contractors, or subcontractors, and any persons acting on Respondents' behalf or under their control, in carrying out activities pursuant to this Settlement. Further, Respondents agree to pay the United States all costs it incurs, including but not limited to attorneys' fees and other expenses of litigation and settlement arising from, or on account of, claims made against the United States based on negligent or other wrongful acts or omissions of Respondents, their officers, directors, employees, agents, contractors, subcontractors, and any persons acting on their behalf or under their control, in carrying out activities pursuant to this Settlement. The United States shall not be held out as a party to any contract entered into by or on behalf of Respondents in carrying out activities pursuant to this Settlement. Neither Respondents nor any such contractor shall be considered an agent of the United States.

106. The United States shall give Respondents notice of any claim for which the United States plans to seek indemnification pursuant to this Section and shall consult with Respondents prior to settling such claim.

107. Respondents covenant not to sue and agree not to assert any claims or causes of action against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States, arising from or on account of any contract, agreement, or arrangement between any one or more of Respondents and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays. In addition, Respondents shall indemnify and hold harmless the United States with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between any one or more of Respondents and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays.

## **XXVII. INSURANCE**

108. No later than \_\_\_ days before commencing any on-site Work, Respondents shall secure, and shall maintain until the first anniversary after issuance of Notice of Completion of Work pursuant to Section XXX (Notice of Completion of Work), commercial general liability insurance with limits of liability of \$1 million per occurrence, automobile liability insurance with limits of liability of \$1 million per accident, and umbrella liability insurance with limits of liability of \$5 million in excess of the required commercial general liability and automobile liability limits, naming EPA as an additional insured with respect to all liability arising out of the activities performed by or on behalf of Respondents pursuant to this Settlement. In addition, for the duration of the Settlement, Respondents shall provide EPA with certificates of such insurance and a copy of each insurance policy. Respondents shall resubmit such certificates and copies of

policies each year on the anniversary of the Effective Date. In addition, for the duration of the Settlement, Respondents shall satisfy, or shall ensure that their contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of worker's compensation insurance for all persons performing Work on behalf of Respondents in furtherance of this Settlement. If Respondents demonstrate by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering some or all of the same risks but in a lesser amount, then, with respect to the contractor or subcontractor, Respondents need provide only that portion of the insurance described above that is not maintained by the contractor or subcontractor. Respondents shall ensure that all submittals to EPA under this Paragraph identify the [Site name, City, State] and the EPA docket number for this action.

## **XXVIII. FINANCIAL ASSURANCE**

**[NOTES ON PARAGRAPHS 109 AND 110: Financial assurance should be included in settlements as a general matter. Case teams should negotiate and finalize the form, substance, and value of Respondents' financial assurance well before finalizing the Settlement so that the final financial assurance mechanism can take effect within 30 days after the Effective Date. Such review should ensure, among other things, that an instrument or account is established (or can be established) to receive financial assurance resources when needed. Case teams can find the most current sample financial assurance documents in the "Financial Assurance - Settlements" category on the Cleanup Enforcement Model Language and Sample Documents Database at <https://cfpub.epa.gov/compliance/models/>. Case teams should also ensure that entities providing a demonstration or guarantee pursuant to Paragraphs 109.e or 109.f have: (1) submitted all required documentation well in advance of finalizing the Settlement so that EPA can determine whether such financial assurance is adequate; and (2) fully and accurately reflected in their submission all of their financial assurance or "performance guarantee" obligations (under CERCLA, RCRA, the Underground Injection Control Program, the Toxic Substances Control Act, and any other federal, state, or tribal environmental obligation) to the United States or other governmental entities so all such obligations have been properly accounted for in determining whether any such entity meets the financial test criteria. When reviewing which of the permissible financial assurance mechanisms set forth in Paragraph 109 may be appropriate for inclusion in the Settlement, case teams should consider, as part of the facts and circumstances of each case, the estimated cost of the Work to be performed, the estimated time to complete the Work, the nature and extent of contamination at the Site, the financial health of Respondents, and the industry sector(s) in which Respondents operate. Regions have discretion, for example, to require that Respondents provide the financial assurance through a liquid mechanism rather than through a demonstration or guarantee pursuant to Paragraphs 109.e or 109.f. If any Respondent is a municipality, contact financial assurance team members within the Office of Site Remediation Enforcement for assistance. For more specific information and considerations, see "Guidance on Financial Assurance in Superfund Settlement Agreements and Unilateral Administrative Orders" (April 6, 2015), available at <http://www2.epa.gov/enforcement/guidance-financial-assurance-superfund-settlements-and-orders>.]**

109. In order to ensure completion of the Work, Respondents shall secure financial assurance, initially in the amount of \$ [\_\_\_\_\_] (“Estimated Cost of the Work”), for the benefit of EPA. The financial assurance must be one or more of the mechanisms listed below, in a form substantially identical to the relevant sample documents available from EPA or under the “Financial Assurance - Settlements” category on the Cleanup Enforcement Model Language and Sample Documents Database at <https://cfpub.epa.gov/compliance/models/>, and satisfactory to EPA. Respondents may use multiple mechanisms if they are limited to surety bonds guaranteeing payment, letters of credit, trust funds, and/or insurance policies.

a. A surety bond guaranteeing payment and/or performance of the Work that is issued by a surety company among those listed as acceptable sureties on federal bonds as set forth in Circular 570 of the U.S. Department of the Treasury;

b. An irrevocable letter of credit, payable to or at the direction of EPA, that is issued by an entity that has the authority to issue letters of credit and whose letter-of-credit operations are regulated and examined by a federal or state agency;

c. A trust fund established for the benefit of EPA that is administered by a trustee that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency;

d. A policy of insurance that provides EPA with acceptable rights as a beneficiary thereof and that is issued by an insurance carrier that has the authority to issue insurance policies in the applicable jurisdiction(s) and whose insurance operations are regulated and examined by a federal or state agency;

e. A demonstration by a Respondent that it meets the financial test criteria of Paragraph 111[, accompanied by a standby funding commitment, which obligates the affected Respondent to pay funds to or at the direction of EPA, up to the amount financially assured through the use of this demonstration in the event of a Work Takeover]; or

**[NOTE: A sample of a standby funding commitment is available via the link in Paragraph 109.]**

f. A guarantee to fund or perform the Work executed in favor of EPA by a company: (1) that is a direct or indirect parent company of a Respondent or has a “substantial business relationship” (as defined in 40 C.F.R. § 264.141(h)) with a Respondent; and (2) can demonstrate to EPA’s satisfaction that it meets the financial test criteria of Paragraph 111.

110. **[If the case team and Respondents have already negotiated the form of the Financial Assurance, use this text:** Respondents have selected, and EPA has found satisfactory, as an initial financial assurance a **[insert type]** in the form attached as Appendix \_\_\_\_\_. Within 30 days after the Effective Date, Respondents shall secure all executed and/or otherwise finalized mechanisms or other documents consistent with the form of financial assurance attached as Appendix \_\_\_\_\_]

**[Otherwise use this text:** Respondents have selected, and EPA has found satisfactory, as an initial financial assurance a **[insert type]** prepared in accordance with Paragraph 109. Within

30 days after the Effective Date, or 30 days after EPA's approval of the form and substance of Respondents' financial assurance, whichever is later, Respondents shall secure all executed and/or otherwise finalized mechanisms or other documents consistent with the EPA-approved form of financial assurance]

**[Keep following text with either option]** and shall submit such mechanisms and documents to the [insert **"Regional Financial Management Officer" or an alternative recipient such as "Regional financial assurance specialist"**] at [insert address].

111. Respondents seeking to provide financial assurance by means of a demonstration or guarantee under Paragraph 109.e or 109.f, must, within 30 days of the Effective Date:

a. Demonstrate that:

(1) the affected Respondent or guarantor has:

- i. Two of the following three ratios: a ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities greater than 0.1; and a ratio of current assets to current liabilities greater than 1.5; and
- ii. Net working capital and tangible net worth each at least six times the sum of the Estimated Cost of the Work and the amounts, if any, of other federal, state, or tribal environmental obligations financially assured through the use of a financial test or guarantee; and
- iii. Tangible net worth of at least \$10 million; and
- iv. Assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of the Estimated Cost of the Work and the amounts, if any, of other federal, state, or tribal environmental obligations financially assured through the use of a financial test or guarantee; or

(2) The affected Respondent or guarantor has:

- i. A current rating for its senior unsecured debt of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A or Baa as issued by Moody's; and
- ii. Tangible net worth at least six times the sum of the Estimated Cost of the Work and the amounts, if any, of other federal, state, or tribal environmental obligations financially assured through the use of a financial test or guarantee; and

- iii. Tangible net worth of at least \$10 million; and
- iv. Assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of the Estimated Cost of the Work and the amounts, if any, of other federal, state, or tribal environmental obligations financially assured through the use of a financial test or guarantee; and

b. Submit to EPA for the affected Respondent or guarantor: (1) a copy of an independent certified public accountant's report of the entity's financial statements for the latest completed fiscal year, which must not express an adverse opinion or disclaimer of opinion; and (2) a letter from its chief financial officer and a report from an independent certified public accountant substantially identical to the sample letter and reports available from EPA or under the "Financial Assurance-Settlements" subject list category on the Cleanup Enforcement Model Language and Sample Documents Database at <https://cfpub.epa.gov/compliance/models/>.

112. Respondents providing financial assurance by means of a demonstration or guarantee under Paragraph 109.e or 109.f must also:

a. Annually resubmit the documents described in Paragraph 111.b within 90 days after the close of the affected Respondent's or guarantor's fiscal year;

b. Notify EPA within 30 days after the affected Respondent or guarantor determines that it no longer satisfies the relevant financial test criteria and requirements set forth in this Section; and

c. Provide to EPA, within 30 days of EPA's request, reports of the financial condition of the affected Respondent or guarantor in addition to those specified in Paragraph 111.b; EPA may make such a request at any time based on a belief that the affected Respondent or guarantor may no longer meet the financial test requirements of this Section.

113. Respondents shall diligently monitor the adequacy of the financial assurance. If any Respondent becomes aware of any information indicating that the financial assurance provided under this Section is inadequate or otherwise no longer satisfies the requirements of this Section, such Respondent shall notify EPA of such information within [7] days. If EPA determines that the financial assurance provided under this Section is inadequate or otherwise no longer satisfies the requirements of this Section, EPA will notify the affected Respondent of such determination. Respondents shall, within 30 days after notifying EPA or receiving notice from EPA under this Paragraph, secure and submit to EPA for approval a proposal for a revised or alternative financial assurance mechanism that satisfies the requirements of this Section. EPA may extend this deadline for such time as is reasonably necessary for the affected Respondent, in the exercise of due diligence, to secure and submit to EPA a proposal for a revised or alternative financial assurance mechanism, not to exceed [60] days. Respondents shall follow the procedures of Paragraph 115 (Modification of Amount, Form, or Terms of Financial Assurance) in seeking approval of, and submitting documentation for, the revised or alternative financial assurance

mechanism. Respondents' inability to secure financial assurance in accordance with this Section does not excuse performance of any other obligation under this Settlement.

**[NOTE REGARDING PARAGRAPH 114 (Access to Financial Assurance): Case teams should make sure that the “trigger” for obtaining funds and/or work under the financial assurance mechanism is consistent with the trigger in the Settlement, e.g., if the Settlement allows EPA to access the funds in the event of a Work Takeover or a Respondent’s failure to provide alternative financial assurance 30 days prior to an impending mechanism cancellation, the mechanism should contain equivalent language.]**

#### 114. Access to Financial Assurance

a. If EPA issues a notice of implementation of a Work Takeover under Paragraph 89.b, then, in accordance with any applicable financial assurance mechanism, **[if a standby funding commitment requirement is included in Paragraph 109.e, insert: and/or related standby funding commitment]**, EPA is entitled to: (1) the performance of the Work; and/or (2) require that any funds guaranteed be paid in accordance with Paragraph 114.d.

b. If EPA is notified by the issuer of a financial assurance mechanism that it intends to cancel the mechanism, and the affected Respondent fails to provide an alternative financial assurance mechanism in accordance with this Section at least 30 days prior to the cancellation date, the funds guaranteed under such mechanism must be paid prior to cancellation in accordance with Paragraph 114.d.

c. If, upon issuance of a notice of implementation of a Work Takeover under Paragraph 89.b, either: (1) EPA is unable for any reason to promptly secure the resources guaranteed under any applicable financial assurance mechanism [and/or related standby funding commitment], whether in cash or in kind, to continue and complete the Work; or (2) the financial assurance is a demonstration or guarantee under Paragraphs 109.e or 109.f, then EPA is entitled to demand an amount, as determined by EPA, sufficient to cover the cost of the remaining Work to be performed. Respondents shall, within \_\_\_ days of such demand, pay the amount demanded as directed by EPA.

d. Any amounts required to be paid under this Paragraph 114 shall be, as directed by EPA: (i) paid to EPA in order to facilitate the completion of the Work by EPA or by another person; or (ii) deposited into an interest-bearing account, established at a duly chartered bank or trust company that is insured by the FDIC, in order to facilitate the completion of the Work by another person. If payment is made to EPA, EPA may deposit the payment into the EPA Hazardous Substance Superfund or into the **[Site name]** Special Account within the EPA Hazardous Substance Superfund to be retained and used to conduct or finance response actions at or in connection with the Site, or to be transferred by EPA to the EPA Hazardous Substance Superfund.

e. All EPA Work Takeover costs not paid under this Paragraph 114 must be reimbursed as Future Response Costs under Section XVI (Payment of Response Costs).

**115. Modification of Amount, Form, or Terms of Financial Assurance.**  
Respondents may submit, on any anniversary of the Effective Date or at any other time agreed to

by the Parties, a request to reduce the amount, or change the form or terms, of the financial assurance mechanism. Any such request must be submitted to EPA in accordance with Paragraph 110, and must include an estimate of the cost of the remaining Work, an explanation of the bases for the cost calculation, and a description of the proposed changes, if any, to the form or terms of the financial assurance. EPA will notify Respondents of its decision to approve or disapprove a requested reduction or change pursuant to this Paragraph. Respondents may reduce the amount of the financial assurance mechanism only in accordance with: (a) EPA's approval; or (b) if there is a dispute, the agreement or written decision resolving such dispute under Section XVIII (Dispute Resolution). Respondents may change the form or terms of the financial assurance mechanism only in accordance with EPA's approval. Any decision made by EPA on a request submitted under this Paragraph to change the form or terms of a financial assurance mechanism shall not be subject to challenge by Respondents pursuant to the dispute resolution provisions of this Settlement or in any other forum. Within 30 days after receipt of EPA's approval of, or the agreement or decision resolving a dispute relating to, the requested modifications pursuant to this Paragraph, Respondents shall submit to EPA documentation of the reduced, revised, or alternative financial assurance mechanism in accordance with Paragraph 110.

**116. Release, Cancellation, or Discontinuation of Financial Assurance.**

Respondents may release, cancel, or discontinue any financial assurance provided under this Section only: (a) if EPA issues a Notice of Completion of Work under Section XXX (Notice of Completion of Work); (b) in accordance with EPA's approval of such release, cancellation, or discontinuation; or (c) if there is a dispute regarding the release, cancellation or discontinuance of any financial assurance, in accordance with the agreement or final decision resolving such dispute under Section XVIII (Dispute Resolution).

**XXIX. MODIFICATION**

117. EPA's Project Coordinator may modify any plan or schedule [or the SOW] in writing or by oral direction. Any oral modification will be memorialized in writing by EPA promptly, but shall have as its effective date the date of EPA's Project Coordinator's oral direction. Any other requirements of this Settlement may be modified in writing by mutual agreement of the parties.

118. If Respondents seek permission to deviate from any approved work plan or schedule [or the SOW], Respondents' Project Coordinator shall submit a written request to EPA for approval outlining the proposed modification and its basis. Respondents may not proceed with the requested deviation until receiving oral or written approval from EPA's Project Coordinator pursuant to Paragraph 117.

119. No informal advice, guidance, suggestion, or comment by EPA's Project Coordinator or other EPA representatives regarding any deliverable submitted by Respondents shall relieve Respondents of their obligation to obtain any formal approval required by this Settlement, or to comply with all requirements of this Settlement, unless it is formally modified.

### XXX. NOTICE OF COMPLETION OF WORK

120. When EPA determines that all Work has been fully performed in accordance with this Settlement, with the exception of any continuing obligations required by this Settlement, including **[insert list of such obligations, e.g., payment of Future Response Costs [, if applicable: land, water, or other resource use restrictions] and Record Retention]**, EPA will provide written notice to Respondents. If EPA determines that any Work has not been completed in accordance with this Settlement, EPA will notify Respondents, provide a list of the deficiencies, and require that Respondents modify the RI/FS Work Plan, if appropriate, in order to correct such deficiencies. Respondents shall implement the modified and approved RI/FS Work Plan and shall submit a modified draft RI Report and/or FS Report in accordance with the EPA notice. Failure by Respondents to implement the approved modified RI/FS Work Plan shall be a violation of this Settlement.

### XXXI. [PUBLIC COMMENT]

**[NOTE: Include this Section if any response costs are compromised under Section XVI (Payment of Response Costs) or this Settlement.]**

121. [Final acceptance by EPA of Paragraph \_\_ (insert paragraph title) **[insert paragraph number within Section XVI that addresses the costs, if any, that are being compromised, or, if in the highly unusual event that either all Past Response Costs or all Future Response Costs are being compromised for, e.g., orphan share compensation, insert instead: “Final acceptance by EPA of the [Past Response Costs] [Future Response Costs] [Past Response Costs and Future Response Costs] compromise included in this Settlement”]** shall be subject to Section 122(i) of CERCLA, 42 U.S.C. § 9622(i), which requires EPA to publish notice of the proposed settlement in the Federal Register, to provide persons who are not parties to the proposed settlement an opportunity to comment, solely, on the cost recovery component of the settlement, and to consider comments filed in determining whether to consent to the proposed settlement. EPA may withhold consent from, or seek to modify, all or part of Section XVI (Payment of Response Costs) of this Settlement if comments received disclose facts or considerations that indicate that Section XVI of this Settlement is inappropriate, improper, or inadequate. Otherwise, Section XVI shall become effective when EPA issues notice to Respondents that public comments received, if any, do not require EPA to modify or withdraw from Section XVI of this Settlement.]

### XXXII. [ATTORNEY GENERAL APPROVAL]

**[NOTE: This Section should be used if Attorney General approval is required for Section XVI (Payment of Response Costs) or this Settlement because total past and projected response costs of the United States at the Site will exceed \$500,000, excluding interest, and the Settlement compromises a claim for past or future costs. If Attorney General approval is required, the Region should consult with DOJ during the negotiations process and obtain written DOJ approval before publishing notice of the proposed cost compromise in the Federal Register. If the Settlement compromises a claim, but Attorney General approval is not required because total response costs are not expected to exceed \$500,000, excluding interest, insert a finding of fact in Section IV above stating that: The Regional**



**Administrator of EPA Region \_\_, or [his/her] delegatee, has determined that the total past and projected response costs of the United States at or in connection with the Site will not exceed \$500,000, excluding interest.]**

122. The Attorney General or [his/her] designee has approved the response cost settlement embodied in this Settlement in accordance with Section 122(h)(1) of CERCLA, 42 U.S.C. § 9622(h)(1).]

### **XXXIII. INTEGRATION/APPENDICES**

123. This Settlement [and its appendices] constitute[s] the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Settlement. The parties acknowledge that there are no representations, agreements, or understandings relating to the settlement other than those expressly contained in this Settlement. [The following appendices are attached to and incorporated into this Settlement:

- a. ["Appendix \_" is the complete list of Respondents.]
- b. ["Appendix \_" is the description and/or map of the Site.]
- c. ["Appendix \_" is the SOW.]
- d. ["Appendix \_" is the financial assurance.].]

### **XXXIV. ADMINISTRATIVE RECORD**

124. EPA will determine the contents of the administrative record file for selection of the remedial action. Respondents shall submit to EPA documents developed during the course of the RI/FS upon which selection of the remedial action may be based. Upon request of EPA, Respondents shall provide copies of plans, task memoranda for further action, quality assurance memoranda and audits, raw data, field notes, laboratory analytical reports, and other reports. Upon request of EPA, Respondents shall additionally submit any previous studies conducted under state, local, or other federal authorities that may relate to selection of the remedial action, and all communications between Respondents and state, local, or other federal authorities concerning selection of the remedial action.

### **XXXV. EFFECTIVE DATE**

125. **[NOTE: Regions may insert specific practice and language.]** This Settlement shall be effective \_\_ days after the Settlement is signed by the Regional Administrator or his/her delegatee **[if the Settlement includes a cost compromise, include the following: , with the exception of Paragraph \_\_ (insert paragraph title) [insert paragraph number within Section XVI that addresses the costs, if any, that are being compromised] [if either all Past Response Costs or all Future Response Costs are being compromised (and, therefore, there is no paragraph within the payment provision to reference) insert instead: , with the exception of the [Past Response Cost] [Future Response Cost] compromise included in this Settlement], which shall be effective when EPA issues notice to Respondents that public comments received, if any, do not require EPA to modify or withdraw from [Paragraph \_\_ (insert**

paragraph title)] [the [Past Response Cost/Future Response Cost] compromise included within this Settlement.] [NOTE: The notice sent after the comment period, if one is required, should inform Respondents that payment is now due in accordance with Paragraph 61.a (Payment for Past Response Costs) [and Paragraph 62.a (Prepayment of Future Response Costs), if applicable].]

IT IS SO AGREED AND ORDERED:

**U.S. ENVIRONMENTAL PROTECTION AGENCY:**

\_\_\_\_\_  
Dated

\_\_\_\_\_  
[Name]  
Regional Administrator (or designee/delegatee), Region \_\_\_\_

Signature Page for Settlement Regarding \_\_\_\_\_ Superfund Site

**FOR** \_\_\_\_\_ :  
[Print name of Respondent]

\_\_\_\_\_  
Dated

\_\_\_\_\_  
[Name]  
[Title]  
[Company]  
[Address]

[NOTE: A separate signature page is required for each settlor.]

## Instructions Regarding Automated Features

FEATURE	INSTRUCTIONS
<b>Inserting text copied from a different document</b>	Text copied from a different document will usually have embedded formatting codes. Pasting the text into your document will cause the formatting codes to be inserted as well, which will create unpredictable and frustrating formatting and numbering results. <b>Therefore, ALWAYS use the “Paste Special” function to insert text copied from another document.</b> Press Ctrl-Alt-V; in the pop-up menu, click “Unformatted Text” and OK. (You can also click the Home tab, Paste, Paste Special, Unformatted Text and OK.)
<b>Inserting a new paragraph</b>	Click at the end of the ¶ immediately preceding the place where you wish to add the new <b>paragraph</b> , and press Enter. To change the new ¶'s outline level use (under the Home tab) the styles menu. For example, to change ¶12.b into ¶12.a(1), click in that ¶ and then (using the Home tab) click the "LVL 3" style. To change ¶13.a into ¶14, click in that ¶ and then (using the Home tab) click the “LVL 1” Style. Note that in consent decree models, the letters denoting each background paragraph must be manually updated.
<b>Adding an updateable section or paragraph cross-reference</b>	(a) Click where you wish to insert a cross-reference; (b) Click the “References” tab, and, in the “Captions” box, click “Cross-reference;” (c) In the pop-up menu that appears, make sure the “Reference type” field contains “Numbered item” and the “Insert reference to” field contains “Paragraph Number (full context); (d) In the “For which numbered item” field” select the numbered item (section, paragraph. or subparagraph) you wish to cross-reference, and click Insert.
<b>Updating the cross-references</b>	Press Ctrl-A (to select entire document); right click; in the pop-up menu, click “Update Field;” click OK. Note: If a numbered paragraph that has been cross-referenced elsewhere in the document is deleted, remove the obsolete paragraph cross-reference. Otherwise, when you update the cross-references, the following message will appear: “Error! Reference source not found.”
<b>Updating the table of contents</b>	Right-click in the TOC, and in the pop-up menu, left-click “Update Field.” Or click in the TOC, press F9, click Update Entire Table and OK. If you have just added a new section heading, click Update entire table before pressing Enter.
<b>Inserting a new section heading</b>	Click in the text of the new heading and assign the “SECTION” paragraph style to the text by clicking the “Home” tab, and in Styles box, clicking the “SECTION” style button.) That will add the section number, change the numbering of later sections, and ensure that the new section will be referenced in the table of contents.
<b>Changing the font</b>	Press Ctrl-A (to select entire document); right click; in the pop-up menu, click “Font;” in the “font” field, select a new font; click OK.

IN THE MATTER OF:	)	
	)	
	)	CERCLA Docket No. _____
[Site Name and Location]	)	
	)	
[Names of Respondents (if many, reference	)	
attached list)],	)	
	)	
Respondents	)	
	)	
Proceeding under Section 106(a)	)	<b>UNILATERAL ADMINISTRATIVE</b>
of the Comprehensive Environmental	)	<b>ORDER FOR REMEDIAL</b>
Response, Compensation, and Liability	)	<b>INVESTIGATION/FEASIBILITY</b>
Act, 42 U.S.C. § 9606(a).	)	<b>STUDY</b>
	)	
	)	

## September 2016

This model and any internal procedures adopted for its implementation and use are intended solely as guidance for employees of the U.S. Environmental Protection Agency. They do not constitute rulemaking by the Agency and may not be relied upon to create a right or benefit, substantive or procedural, enforceable at law or in equity, by any person. The Agency may take action at variance with this model or its internal implementing procedures.

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**[NOTE: Bracketed sections above are optional.]**

## I. JURISDICTION AND GENERAL PROVISIONS

1. This Administrative Order (“Order”) is issued under the authority vested in the President of the United States by Section 106(a) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9606(a). This authority was delegated to the Administrator of the United States Environmental Protection Agency (EPA) by Executive Order No. 12580, 52 Fed. Reg. 2923 (Jan. 23, 1987), and further delegated to the Regional Administrators by EPA Delegation Nos. 14-14-A and 14-14-B. **[Insert if applicable: This authority was further redelegated by the Regional Administrator of EPA Region \_\_\_\_ to the \_\_\_\_\_ [insert title of manager to whom delegation is made] by [insert numerical designations and dates of Regional redelegations].]**

2. This Order pertains to property located at **[insert address or descriptive location of the Site]** in **[insert name of City or Town, County, State]** (the “[insert name] Site” or the “Site”). This Order requires Respondents to prepare and perform a remedial investigation/feasibility study (RI/FS) to: (a) determine the nature and extent of contamination and any threat to the public health, welfare, or the environment caused by the release or threatened release of hazardous substances [, pollutants, or contaminants] at or from the Site; and (b) identify and evaluate remedial alternatives to prevent, mitigate, or otherwise respond to or remedy any release or threatened release of hazardous substances [, pollutants, or contaminants] at or from the Site, in order to abate an imminent and substantial endangerment to the public health or welfare or the environment that may be presented by the actual or threatened release of hazardous substances at or from the Site.

3. EPA has notified the State **[insert “Commonwealth” if appropriate]** of \_\_\_\_\_ (the “State”) of this action pursuant to Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

## II. PARTIES BOUND

4. This Order applies to and is binding upon Respondents and their [heirs,] successors[,], and assigns. Any change in ownership or control of the Site or change in the corporate or partnership status of a Respondent, including, but not limited to, any transfer of assets or real or personal property, shall not alter Respondents’ responsibilities under this Order.

5. Respondents are jointly and severally liable for implementing all activities required by this Order. Compliance or noncompliance by any Respondent with any provision of this Order shall not excuse or justify noncompliance by any other Respondent. No Respondent shall interfere in any way with performance of the Work in accordance with this Order by any other Respondent. In the event of the insolvency or other failure of any one or more Respondents to implement the requirements of this Order, the remaining Respondents shall complete all such requirements.

6. Respondents shall provide a copy of this Order to each contractor hired to perform the Work required by this Order and to each person representing any Respondent with respect to the Site or the Work, and shall condition all contracts entered into under this Order upon performance of the Work in conformity with the terms of this Order. Respondents or their contractors shall provide written notice of the Order to all subcontractors hired to perform any

portion of the Work required by this Order. Respondents shall nonetheless be responsible for ensuring that their contractors and subcontractors perform the Work in accordance with the terms of this Order.

### III. DEFINITIONS

7. Unless otherwise expressly provided in this Order, terms used in this Order that are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Order or in appendices to or documents incorporated by reference into this Order, the following definitions shall apply:

**[NOTE: In the definition below, it is generally sufficient to describe the property using the street address or the tax parcel ID number, but you also may use the legal property description. Legal property descriptions can be lengthy. It is common in conveyance documents to include the legal property description in an attachment. If using a legal property description, it should be the kind found in a deed.]**

“Affected Property” shall mean all real property at the Site and any other real property where EPA determines, at any time, that access, land, water, or other resource use restrictions are needed to implement the RI/FS, including, but not limited to, the following properties **[insert property descriptions]**.

“CERCLA” shall mean the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9601-9675.

“Day” or “day” shall mean a calendar day. In computing any period of time under this Order, where the last day would fall on a Saturday, Sunday, or federal or State holiday, the period shall run until the close of business of the next working day.

“Effective Date” shall mean the effective date of this Order as provided in Section VIII.

“Engineering Controls” shall mean constructed containment barriers or systems that control one or more of the following: downward migration, infiltration, or seepage of surface runoff or rain; or natural leaching migration of contaminants through the subsurface over time. Examples include caps, engineered bottom barriers, immobilization processes, and vertical barriers.

“EPA” shall mean the United States Environmental Protection Agency and its successor departments, agencies, or instrumentalities.

“EPA Hazardous Substance Superfund” shall mean the Hazardous Substance Superfund established by the Internal Revenue Code, 26 U.S.C. § 9507.

[“\_\_\_\_\_” shall mean the **[insert name of State pollution control agency or environmental protection agency]** and any successor departments or agencies of the State.]



“Institutional Controls” or “ICs” shall mean Proprietary Controls and state or local laws, regulations, ordinances, zoning restrictions, or other governmental controls or notices that: (a) limit land, water, or other resource use to minimize the potential for human exposure to Waste Material at or in connection with the Site; (b) limit land, water, or other resource use to implement, ensure non-interference with, or ensure the protectiveness of the response action pursuant to this Order; and/or (c) provide information intended to modify or guide human behavior at or in connection with the Site.

**[NOTE: A definition for “Interest” should not be included if Section XIX (Payment of Response Costs) is not included in the Order.]**

[“Interest” shall mean interest at the rate specified for interest on investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded annually on October 1 of each year, in accordance with 42 U.S.C. § 9607(a). The applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year. Rates are available online at <https://www.epa.gov/superfund/superfund-interest-rates>.]

“National Contingency Plan” or “NCP” shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, and any amendments thereto.

**[NOTE: Include next definition if any “Affected Property” is owned or controlled by persons other than any Respondent.]**

[“Non-Respondent Owner” shall mean any person, other than a Respondent, that owns or controls any Affected Property, including [insert names]. The clause “Non-Respondent Owner’s Affected Property” means Affected Property owned or controlled by Non-Respondent Owner.]

“Order” shall mean this Unilateral Administrative Order, all appendices attached hereto. In the event of conflict between this Order and any appendix, this Order shall control.

**[NOTE: Include next definition if any “Affected Property” is owned or controlled by any Respondent.]**

[“Owner Respondent” shall mean any Respondent that owns or controls any Affected Property, including [insert names]. The clause “Owner Respondent’s Affected Property” means Affected Property owned or controlled by Owner Respondent.]

“Paragraph” shall mean a portion of this Order identified by an Arabic numeral or an upper or lower case letter.

“Parties” shall mean EPA and Respondents.

“Proprietary Controls” shall mean easements or covenants running with the land that (a) limit land, water, or other resource use and/or provide access rights and (b) are created

pursuant to common law or statutory law by an instrument that is recorded in the appropriate land records office.

“RCRA” shall mean the Solid Waste Disposal Act, 42 U.S.C. §§ 6901-6992 (also known as the Resource Conservation and Recovery Act).

“Respondents” shall mean [insert names of Respondents] [insert if applicable: those Parties identified in Appendix \_\_\_\_].

**[NOTE: A definition for “Response Costs” should not be included if Section XIX (Payment of Response Costs) is not included in the Order.]**

[“Response Costs” shall mean all costs, including, but not limited to, direct and indirect costs, that the United States incurs in monitoring and supervising Respondents’ performance of the Work to determine whether such performance is consistent with the requirements of this Order, including costs incurred in reviewing any deliverable submitted pursuant to this Order, as well as costs incurred in overseeing implementation of this Order, including, but not limited to, payroll costs, contractor costs, travel costs, and laboratory costs.]

“Section” shall mean a portion of this Order identified by a Roman numeral.

“Site” shall mean the \_\_\_\_\_ Superfund Site, encompassing approximately \_\_\_\_ acres, located at [insert address or description of location] in [city], \_\_\_\_\_ County, [state] [insert if applicable: , and depicted generally on the map attached as Appendix \_\_\_\_].

“State” [or “Commonwealth”] shall mean the State [or Commonwealth] of \_\_\_\_\_.

“Statement of Work” or “SOW” shall mean the document describing the activities Respondents must perform to develop the RI/FS for [insert “the Site” or “Operable Unit(s) \_\_\_\_ for the Site”], as set forth in Appendix \_\_\_\_ to this Order. The Statement of Work is incorporated into this Order and is an enforceable part of this Order as are any modifications made thereto in accordance with this Order.

“Transfer” shall mean to sell, assign, convey, lease, mortgage, or grant a security interest in, or where used as a noun, a sale, assignment, conveyance, or other disposition of any interest by operation of law or otherwise.

**[NOTE: Substitute the following definition of “Tribe” for the definition of “State” if the Site is entirely on tribal land. Add a definition for “Tribe” in addition to the definition of “State” if both have a role at or interest in the Site. Additional changes will be needed throughout the Order to either add and/or substitute the Tribe for the State.]**

[“Tribe” shall mean the \_\_\_\_\_ Tribe.]

“United States” shall mean the United States of America and each department, agency, and instrumentality of the United States, including EPA.

“Waste Material” shall mean: (a) any “hazardous substance” under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (b) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); (c) any “solid waste” under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27); and (d) any [“hazardous material”] under [insert appropriate State statutory citation and “hazardous material” terminology].

“Work” shall mean all activities and obligations Respondents are required to perform under this Order, except those required by Section XVI (Record Retention).

#### IV. FINDINGS OF FACT

**[NOTE: Because findings of fact are site-specific, no specific model language is provided. However, suggested topics are provided below for some findings. Facts should be presented concisely, accurately, and logically. Findings of fact should clearly support each conclusion of law. Regions should include a discussion of the following points: identification of Respondents; Site location and description; Site history and operations; Site ownership; enforcement history; general categories of Respondents’ liability; past EPA and/or State activities and investigations; and conditions and data showing hazardous substances are present and releases or threats of releases exist. The Order should contain findings of fact sufficient to support the determination of imminent and substantial endangerment (ISE) by the authorized delegated official and reference the actual ISE determination. If such a determination has not been previously made, this Section should include data clearly documenting that the releases or threats of releases may present an ISE, e.g., exposure routes, risk assessment, affected populations, environmental harm, potential for fire or explosion, or other dangers, and should be fully supported by an administrative record.]**

8. [Identification of the Site by name, location, and description (including characteristics of the Site and a description of the surrounding areas, e.g., commercial/industrial/residential area, nearest public supply wells, nearby water bodies, potentially sensitive ecological areas).]

9. [A brief history of the Site including Site ownership and operations (process or other activity producing waste, nature of wastes produced).]

10. [Information that there are hazardous substances at the Site by listing specific chemicals found at the Site, and their locations, concentrations, and quantities where known.]

11. [Description of actual and/or potential release (i.e. leaking drums, contaminated soils, etc.) and contaminant migration pathways, and possible or known routes of exposure, making clear that these are not exclusive.]

12. [Identification of the populations at risk, both human and non-human.]

13. [Health/environmental effects of some major contaminants.]

14. [Whether the Site is on the [proposed] National Priorities List. Sample language follows:

“The \_\_\_\_\_ Site was [listed on] [proposed for inclusion on] the National Priorities List (NPL) by EPA pursuant to CERCLA § 105, 42 U.S.C. § 9605, on [insert month, day, year], [insert Federal Register citation].”]

15. [Identification of Respondents, i.e., name/business; legal status (i.e., corporation, partnership, sole proprietor, trust, individual, federal, state, or local government, etc.), general categories of Respondents’ liability under CERCLA § 107(a) and connection with the Site, e.g., owner or operator of hazardous waste site, including years of ownership or operation, or person who arranged for disposal or treatment of, or transporter of hazardous substances found at the Site.]

16. [Identification of prior response and enforcement actions, including investigations and assessments, if any, taken at the Site, by EPA or the State.]

## V. CONCLUSIONS OF LAW AND DETERMINATIONS

17. Based on the Findings of Fact set forth above and the administrative record, EPA has determined that:

a. The [insert name] Site is a “facility” as defined by Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

b. Each Respondent is a “person” as defined by Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).

c. Each Respondent is a liable party under one or more provisions of Section 107(a) of CERCLA, 42 U.S.C. § 9607(a). **[NOTE: Regions should specify each category of liability under Section 107. For example:**

- (1) Respondents [insert names] are the “owner(s)” and/or “operator(s)” of the facility, as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of Section 107(a)(1) of CERCLA, 42 U.S.C. § 9607(a)(1).
- (2) Respondents [insert names] were the “owners” and/or “operators” of the facility at the time of disposal of hazardous substances at the facility, as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of Section 107(a)(2) of CERCLA, 42 U.S.C. § 9607(a)(2).
- (3) Respondents [insert names] arranged for disposal or treatment, or arranged with a transporter for transport for disposal or treatment of hazardous substances at the facility, within the meaning of Section 107(a)(3) of CERCLA, 42 U.S.C. § 9607(a)(3).
- (4) Respondents [insert names] accept or accepted hazardous substances for transport to the facility, within the meaning of Section 107(a)(4) of CERCLA, 42 U.S.C. § 9607(a)(4).]

d. The contamination [**insert the names of the particular hazardous substances**] found at the Site, as identified in the Findings of Fact above, includes [a] “hazardous substance[s]” as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14) [, and also includes [a] “pollutant[s] or contaminant[s]” that may present an imminent and substantial danger to public health or welfare under Section 104(a)(1) of CERCLA, 42 U.S.C. § 9604(a)(1)].

e. The conditions described in [Paragraphs \_\_\_ of] the Findings of Fact above constitute an actual and/or threatened “release” of a hazardous substance from the facility as defined by Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).

f. The conditions at the Site may constitute a threat to public health or welfare or the environment, based on the factors set forth in Section 300.415(b)(2) of the NCP. These factors include, but are not limited to, the following [**include only those that apply**]:

- (1) actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances [and pollutants and contaminants]; this factor is present at the Site due to the existence of [**identify**];
- (2) actual or potential contamination of drinking water supplies or sensitive ecosystems; this factor is present at the Site due to the existence of [**identify**];
- (3) hazardous substances [and pollutants and contaminants] in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release; this factor is present at the Site due to the existence of [**identify**];
- (4) high levels of hazardous substances [and pollutants and contaminants] in soils largely at or near the surface, that may migrate; this factor is present at the Site due to the existence of [**identify**];
- (5) weather conditions that may cause hazardous substances [and pollutants and contaminants] to migrate or be released; this factor is present at the Site due to the existence of [**identify**];
- (6) threat of fire or explosion; this factor is present at the Site due to the existence of [**identify**];
- (7) the unavailability of other appropriate federal or state response mechanisms to respond to the release; this factor supports the actions required by this Order at the Site because [**describe**]; and
- (8) other situations or factors that may pose threats to public health or welfare or the environment; this factor is present at the Site due to the existence of [**identify**].

g. The conditions at the Site may constitute an imminent and substantial endangerment to public health or welfare or the environment.

h. The actions required by this Order are necessary to protect the public health, welfare, or the environment.

## **VI. ORDER**

18. Based upon the Findings of Fact, Conclusions of Law and Determinations set forth above, and the administrative record, Respondents are hereby ordered to comply with all provisions of this Order and any modifications to this Order, including all appendices to this Order and all documents incorporated by reference into this Order.

## **VII. OPPORTUNITY TO CONFER**

19. Within [5] days after this Order is signed by the Regional Administrator or his/her delegatee, Respondents may, in writing, request a conference with EPA to discuss this Order, including its applicability, the factual findings and the determinations upon which it is based, the appropriateness of any actions Respondents are ordered to take, or any other relevant and material issues or contentions that Respondents may have regarding this Order.

20. Respondents may appear in person or by an attorney or other representative at the conference. Any such conference shall be held at least [5] days prior to the Effective Date. Respondents may also submit written comments or statements of position on any matter pertinent to this Order no later than [5] days after the conference, or within [10] days **[NOTE: this date should coincide with the conference date plus [5] days]** after this Order is signed if a conference is not requested. This conference is not an evidentiary hearing, does not constitute a proceeding to challenge this Order, and does not give Respondents a right to seek review of this Order. Any request for a conference or written comments or statements should be submitted to:

[Attorney], [Office of Regional Counsel or Office of Environmental Stewardship]  
United States Environmental Protection Agency  
[Address]  
[Telephone]  
[Email]

## **VIII. EFFECTIVE DATE**

**[NOTE: Regions may modify Paragraph 21 in accordance with Regional practice. The provision for scheduling a conference date in Paragraph 19 should be drafted so that holding the conference will not unduly delay the Effective Date. Regions may issue unilateral administrative orders (UAOs) that include a delayed effective date in order to encourage negotiation.]**

21. This Order shall be effective [5] days after the Order is signed by the Regional Administrator or his/her delegatee unless a conference is requested or written materials submitted in accordance with Section VII (Opportunity to Confer). If a conference is requested or written materials are submitted, this Order shall be effective on the later of the [10<sup>th</sup>] day after

the conference, or the [10<sup>th</sup>] day after written materials, if any, are submitted, unless EPA determines that the Order should be modified based on the conference or written materials. In such event, EPA shall notify Respondents, within the [10] day period, that EPA intends to modify the Order. The modified Order shall be effective [5] days after it is signed by the Regional Administrator or his/her delegatee.

## **IX. NOTICE OF INTENT TO COMPLY**

**[NOTE: The timing of Respondents' opportunity to confer under Section VII should always precede the deadline for the notice of intent to comply.]**

22. On or before the Effective Date, each Respondent shall notify EPA in writing of Respondent's irrevocable intent to comply with this Order. Such written notice shall be sent to EPA as provided in Paragraph 20. Each Respondent's written notice shall describe, using facts that exist on or prior to the Effective Date, any "sufficient cause" defense(s) asserted by such Respondent under Sections 106(b) and 107(c)(3) of CERCLA, 42 U.S.C. §§ 9606(b) and 9607(c)(3). The absence of a response by EPA to the notice required by this Paragraph shall not be deemed to be acceptance of any Respondent's assertions. Failure of any Respondent to provide such written notice within this time period shall, as of the Effective Date, be treated as a violation of this Order by such Respondent.

## **X. DESIGNATION OF CONTRACTORS AND PROJECT COORDINATORS**

23. **Selection of Contractors, Personnel.** All Work performed under this Order shall be under the direction and supervision of qualified personnel. Within 30 days after the Effective Date, and before the Work outlined below begins, Respondents shall notify EPA in writing of the names, titles, addresses, telephone numbers, email addresses, and qualifications of the personnel, including contractors, subcontractors, consultants, and laboratories to be used in carrying out such Work. If, after the commencement of Work, Respondents retain additional contractors or subcontractors, Respondents shall notify EPA of the names, titles, contact information, and qualifications of such contractors or subcontractors retained to perform the Work at least \_\_ days prior to commencement of Work by such additional contractors or subcontractors. EPA retains the right, at any time, to disapprove of any or all of the contractors and/or subcontractors retained by Respondents. If EPA disapproves of a selected contractor or subcontractor, Respondents shall retain a different contractor or subcontractor and shall notify EPA of that contractor's or subcontractor's name, title, contact information, and qualifications within \_\_ days after EPA's disapproval. With respect to any proposed contractor, Respondents shall demonstrate that the proposed contractor demonstrates compliance with ASQ/ANSI E4:2014 "Quality management systems for environmental information and technology programs – Requirements with guidance for use" (American Society for Quality, February 2014), by submitting a copy of the proposed contractor's Quality Management Plan (QMP). The QMP should be prepared in accordance with "EPA Requirements for Quality Management Plans (QA/R-2)," EPA/240/B-01/002 (Reissued May 2006) or equivalent documentation as determined by EPA. The qualifications of the persons undertaking the Work for Respondents shall be subject to EPA's review for verification based on objective assessment criteria (e.g., experience, capacity, technical expertise) and that they do not have a conflict of interest with respect to the project.

24. Within \_\_\_ days after the Effective Date, Respondents shall designate a Project Coordinator who shall be responsible for administration of the Work required by this Order and shall submit to EPA the designated Project Coordinator's name, title, address, telephone number, email address, and qualifications. To the greatest extent possible, the Project Coordinator shall be present on-Site or readily available during the Work. EPA retains the right to disapprove of a designated Project Coordinator who does not meet the requirements of Paragraph 23 (Selection of Contractors, Personnel). If EPA disapproves of the designated Project Coordinator, Respondents shall retain a different Project Coordinator and shall notify EPA of that person's name, title, contact information, and qualifications within \_\_\_ days following EPA's disapproval. Respondents shall have the right to change their Project Coordinator, subject to EPA's right to disapprove. Respondents shall notify EPA \_\_\_ days before such a change is made. The initial notification may be made orally, but shall be promptly followed by a written notification. Communications between Respondents and EPA, and all documents concerning the activities performed pursuant to this Order, shall be directed to the Project Coordinator. Receipt by Respondents' Project Coordinator of any notice or communication from EPA relating to this Order shall constitute receipt by all Respondents.

25. EPA has designated \_\_\_\_\_ of the [**insert Regional Office, e.g., Emergency and Enforcement Response Branch, Region \_\_**], as its Project Coordinator [**replace with "On-Scene Coordinator" (OSC) or "Remedial Project Manager" (RPM) as appropriate, here and throughout Order**]. EPA will notify Respondents of a change of its designated Project Coordinator. Communications between Respondents and EPA, and all documents concerning the activities performed pursuant to this Order, shall be directed to the EPA Project Coordinator in accordance with Paragraph 36.a.

26. EPA's Project Coordinator shall have the authority lawfully vested in a Remedial Project Manager (RPM) and On-Scene Coordinator (OSC) by the NCP. In addition, EPA's Project Coordinator shall have the authority, consistent with the NCP, to halt, conduct, or direct any Work required by this Order, or to direct any other response action when s/he determines that conditions at the Site constitute an emergency situation or may present a threat to public health or welfare or the environment. Absence of the EPA Project Coordinator from the area under study pursuant to this Order shall not be cause for stoppage or delay of Work.

## **XI. WORK TO BE PERFORMED**

**[NOTE: Regions may choose between two alternatives for this Section, each of which may be modified on a site-by-site basis to reflect Site needs and Regional practice. The Regions may use Alternative 1, modified in accordance with Regional practice, to describe, in general, the major components of the Work at the Site, but without restating the provisions covered by the SOW, or they may use the more detailed Alternative 2, which contains provisions found in the SOW. Depending on how the SOW is drafted, use of Alternative 1 may also eliminate the need for other paragraphs in this Section. However, Regions opting to use Alternative 1 must ensure that the following provisions are addressed either in the Order or in the SOW as appropriate:**

- 1) Paragraph 30.d (Community Involvement Plan)**
- 2) Paragraph 30.f (Reuse Assessment)**



- 3) Paragraph 30.g (Baseline Human Health Risk Assessment and Ecological Risk Assessment)
- 4) Paragraph 30.k(1) (Memorandum on Remedial Action Objectives) - inclusion of remedial action objectives for Engineering Controls and Institutional Controls
- 5) Paragraph 30.l(4) (Alternatives Analysis for Institutional Controls and Screening)

**Regions opting to use the more comprehensive Alternative 2 should make sure that any changes made to the SOW are accurately reflected in the applicable provisions of this Order. Please note that Alternative 2 is not intended to replace the SOW as it is not a comprehensive restatement of the SOW.**

**Regions should also address the use of presumptive remedies in the SOW, if appropriate and applicable to any area of the Site. Consult EPA's Guidance titled "Implementing Presumptive Remedies: A Notebook of Guidance and Resource Materials" (EPA 540-R-97-029, October 1997) for more information on the use of presumptive remedies.]**

27. For any regulation or guidance referenced in the Order, the reference will be read to include any subsequent modification, amendment, or replacement of such regulation or guidance. Such modifications, amendments, or replacements apply to the Work only after Respondents receive notification from EPA of the modification, amendment, or replacement.

28. **[Alternative 1: Paragraphs 28 and 29]** [Respondents shall conduct the RI/FS and prepare all plans in accordance with the provisions of this Order, the attached SOW, CERCLA, the NCP, and EPA guidance, including, but not limited to, the "Interim Final Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA" ("RI/FS Guidance"), OSWER Directive # 9355.3-01 (October 1988), available at <https://semspub.epa.gov/src/document/11/128301>, "Guidance for Data Useability in Risk Assessment (Part A), Final," OSWER Directive #9285.7-09A, PB 92-963356 (April 1992), available at <http://semspub.epa.gov/src/document/11/156756>, and guidance referenced therein, and guidance referenced in the SOW. The Remedial Investigation (RI) shall consist of collecting data to characterize site conditions, determining the nature and extent of the contamination at or from the Site, assessing risk to human health and the environment and conducting treatability testing as necessary to evaluate the potential performance and cost of the treatment technologies that are being considered. The Feasibility Study (FS) shall determine and evaluate (based on treatability testing, where appropriate) alternatives for remedial action to prevent, mitigate, or otherwise respond to or remedy the release or threatened release of hazardous substances [, pollutants, or contaminants] at or from the Site. The alternatives evaluated must include, but shall not be limited to, the range of alternatives described in the NCP, 40 C.F.R. 300.430(e), and shall include remedial actions that utilize permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable. In evaluating the alternatives, Respondents shall address the factors required to be taken into account by Section 121 of CERCLA, 42 U.S.C. § 9621, and 40 C.F.R. § 300.430(e).

29. All written documents prepared by Respondents pursuant to this Order shall be submitted by Respondents in accordance with Section XII (Submission and Approval of Deliverables). With the exception of progress reports and the Health and Safety Plan, all such

submittals will be reviewed and approved by EPA in accordance with Section XII (Submission and Approval of Deliverables). Respondents shall implement all EPA approved, conditionally approved, or modified deliverables.]

30. **[Alternative 2: Paragraph 30.a-m.] [Activities and Deliverables.]**

a. Respondents shall conduct activities and submit all deliverables as provided by the SOW, for the development of the RI/FS. All such Work shall be conducted in accordance with the provisions of this Order, the attached SOW, CERCLA, the NCP, and EPA guidance, including, but not limited to, the “Interim Final Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA” (“RI/FS Guidance”), OSWER Directive No. 9355.3-01 (October 1988), available at <http://semspub.epa.gov/src/document/11/128301>, “Guidance for Data Useability in Risk Assessment (Part A), Final” (OSWER Directive No. 9285.7-09A, PB 92-963356 (April 1992), available at <http://semspub.epa.gov/src/document/11/156756>, and guidance referenced therein, and guidance referenced in the SOW. The Remedial Investigation (RI) shall consist of collecting data to characterize site conditions, determining the nature and extent of the contamination at or from the Site, assessing risk to human health and the environment and conducting treatability testing as necessary to evaluate the potential performance and cost of the treatment technologies that are being considered. The Feasibility Study (FS) shall determine and evaluate (based on treatability testing, where appropriate) alternatives for remedial action to prevent, mitigate, or otherwise respond to or remedy the release or threatened release of hazardous substances [, pollutants, or contaminants] at or from the Site. The general activities that Respondents are required to perform are identified below, followed by a list of deliverables. The tasks that Respondents must perform are described more fully in the SOW and guidance. The activities and deliverables identified below shall be developed as provided in the RI/FS Work Plan and Sampling and Analysis Plan, and shall be submitted to EPA as provided therein. All Work performed under this Order shall be in accordance with the schedules in this Order or established in the SOW, and in full accordance with the standards, specifications, and other requirements of the RI/FS Work Plan and Sampling and Analysis Plan, as initially approved or modified by EPA, and as may be amended or modified by EPA from time to time.

b. All written documents prepared by Respondents pursuant to this Order shall be submitted by Respondents in accordance with Section XII (Submission and Approval of Deliverables). With the exception of progress reports and the Health and Safety Plan, all such submittals will be reviewed and approved by EPA in accordance with Section XII (Submission and Approval of Deliverables). Respondents shall implement all EPA approved, conditionally approved, or modified deliverables.

c. **Scoping.** EPA will determine the Site-specific objectives of the RI/FS and devise a general management approach for the Site, as stated in the SOW. Respondents shall conduct the remainder of scoping activities as described in the SOW and referenced guidance. At the conclusion of the project planning phase, as referenced in Chapter 2.2 of the RI/FS Guidance, Respondents shall provide EPA with the following deliverables:

- (1) **RI/FS Work Plan.** Within \_\_\_\_ days after the Effective Date  
[NOTE: Regions may change this provision to any other

**appropriate milestone, e.g., within 60 days after notice of contractor approval],** Respondents shall submit an RI/FS Work Plan to EPA for review and approval. Upon its approval by EPA pursuant to Section XII (Submission and Approval of Deliverables), the RI/FS Work Plan shall be incorporated into and become enforceable under this Order.

**[NOTE: Regions may include the list of items to be included in the RI/FS Work Plan or provide a cross-reference to the SOW provision that lists those items.]**

- (2) **Sampling and Analysis Plan.** Within \_\_\_ days after the Effective Date, Respondents shall submit a Sampling and Analysis Plan to EPA for review and approval pursuant to Section XII (Submission and Approval of Deliverables). This plan shall consist of a Field Sampling Plan (FSP) and a Quality Assurance Project Plan (QAPP), as described in the SOW, that is consistent with the NCP, **[insert any contaminant specific or Regional specific applicable guidance documents,]** “Guidance for Quality Assurance Project Plans (QA/G-5),” EPA/240/R-02/009 (December 2002), “EPA Requirements for Quality Assurance Project Plans (QA/R-5),” EPA 240/B-01/003 (March 2001, reissued May 2006), and “Uniform Federal Policy for Quality Assurance Project Plans, Parts 1-3,” EPA/505/B-04/900A-900C (March 2005). Upon its approval by EPA pursuant to Section XII (Submission and Approval of Deliverables), the Sampling and Analysis Plan shall be incorporated into and become enforceable under this Order.
- (3) **Health and Safety Plan.** Within \_\_\_ days after the Effective Date, Respondents shall submit for EPA review and comment a Health and Safety Plan that ensures the protection of on-site workers and the public during performance of on-site Work under this Order. This plan shall be prepared in accordance with “OSWER Integrated Health and Safety Program Operating Practices for OSWER Field Activities,” Pub. 9285.0-OIC (Nov. 2002), available on the NSCEP database at <https://www.epa.gov/nscep/index.html>, and “EPA’s Emergency Responder Health and Safety Manual,” OSWER Directive 9285.3-12 (July 2005 and updates), available at [https://www.epaossc.org/\\_HealthSafetyManual/manual-index.htm](https://www.epaossc.org/_HealthSafetyManual/manual-index.htm). In addition, the plan shall comply with all currently applicable Occupational Safety and Health Administration (OSHA) regulations found at 29 C.F.R. Part 1910. If EPA determines that it is appropriate, the plan shall also include contingency planning. **[NOTE: Regions may provide more detail, e.g., Spill Prevention Control and Countermeasures Plan, evacuation plans, etc.]** Respondents shall incorporate all changes to the plan provided by EPA and shall implement the plan during the pendency of the RI/FS.

d. **Community Involvement Plan [insert the following for Superfund Alternative Approach settlements: and Technical Assistance Plan].** EPA will prepare a community involvement plan, in accordance with EPA guidance and the NCP.

- (1) If requested by EPA, Respondents shall participate in community involvement activities, including participation in (i) the preparation of information regarding the Work for dissemination to the public, with consideration given to including mass media and/or Internet notification, and (ii) public meetings that may be held or sponsored by EPA to explain activities at or relating to the Site. Respondents' support of EPA's community involvement activities may include providing online access to initial submissions and updates of deliverables to (i) any Community Advisory Groups, (ii) any Technical Assistance Grant recipients and their advisors, and (iii) other entities to provide them with a reasonable opportunity for review and comment. All community involvement activities conducted by Respondents at EPA's request are subject to EPA's oversight. **[Insert if the Region contemplates conducting enhanced community involvement during the RI/FS:** Upon EPA's request, Respondents shall make all deliverables available on a website that is accessible to the public.] Upon EPA's request, Respondents shall establish a community information repository at or near the Site to house one copy of the administrative record.
- (2) As requested by EPA, Respondents shall, within [15] days, designate and notify EPA of Respondents' Community Involvement Coordinator ("CI Coordinator"). Respondents may hire a contractor for this purpose. Respondents' notice must include the name, title, and qualifications of the Respondents' CI Coordinator. Respondents' CI Coordinator is responsible for providing support regarding EPA's community involvement activities, including coordinating with EPA's CI Coordinator regarding responses to the public's inquiries about the Site.

e. **Site Characterization.** Following EPA approval or modification of the RI/FS Work Plan and Sampling and Analysis Plan, Respondents shall implement the provisions of these plans to characterize the Site. Respondents shall complete Site characterization and submit all deliverables in accordance with the schedules and deadlines established in this Order, the attached SOW, and/or the EPA-approved RI/FS Work Plan and Sampling and Analysis Plan.

f. **Reuse Assessment.** If EPA determines that a Reuse Assessment is necessary,<sup>1</sup> Respondents will perform the Reuse Assessment in accordance with the SOW, RI/FS Work Plan, and applicable guidance. The Reuse Assessment should provide sufficient

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<sup>1</sup> OSWER Directive No. 9355.7-06P, "Reuse Assessments: A Tool to Implement the Superfund Land Use Directive," states that "[d]etermining the applicability and scope of a reuse assessment will be dependent on site specific circumstances and/or the overall approach anticipated for addressing the site." The guidance indicates that a reuse assessment may not be necessary at every site.

information to develop realistic assumptions of the reasonably anticipated future uses for the Site. Respondents shall prepare the Reuse Assessment in accordance with EPA guidance, including, but not limited to, “Reuse Assessments: A Tool to Implement the Superfund Land Use Directive,” OSWER Directive 9355.7-06P (June 2001).<sup>2</sup>

g. **Baseline Human Health Risk Assessment and Ecological Risk Assessment.**<sup>3</sup> Respondents will perform the Baseline Human Health Risk Assessment and Ecological Risk Assessment (“Risk Assessments”) in accordance with the SOW, RI/FS Work Plan, and applicable EPA guidance, including but not limited to: “Interim Final Risk Assessment Guidance for Superfund, Volume I - Human Health Evaluation Manual (Part A),” RAGS, EPA-540-1-89-002, OSWER Directive 9285.7-01A (December 1989); “Interim Final Risk Assessment Guidance for Superfund, Volume I - Human Health Evaluation Manual (Part D, Standardized Planning, Reporting, and Review of Superfund Risk Assessments),” RAGS, EPA 540-R-97-033, OSWER Directive 9285.7-01D (January 1998); and “Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments,” ERAGS, EPA-540-R-97-006, OSWER Directive 9285.7-25 (June 1997).

h. **Draft RI Report.** Within \_\_ days after EPA’s approval of the Risk Assessments, Respondents shall submit to EPA for review and approval pursuant to Section XII (Submission and Approval of Deliverables), a draft Remedial Investigation Report (“RI Report”) consistent with the SOW, RI/FS Work Plan, and Sampling and Analysis Plan. The draft RI Report shall also contain the Risk Assessments.

i. **Treatability Studies.** Respondents shall conduct treatability studies, except where Respondents can demonstrate to EPA’s satisfaction that they are not needed. The major components of the treatability studies are described in the SOW. In accordance with the schedules or deadlines established in this Order, the attached SOW, and/or the EPA-approved RI/FS Work Plan, Respondents shall provide EPA with the following deliverables for review and approval pursuant to Section XII (Submission and Approval of Deliverables):

- (1) **Identification of Candidate Technologies Memorandum.** This memorandum shall be submitted [insert: “within \_\_ days after the Effective Date,” “as specified by EPA,” or other scheduling provision preferred by the Region].
- (2) **Treatability Test Statement of Work.** If EPA determines that treatability testing is required, within \_\_ days thereafter [or as specified by EPA], Respondents shall submit a Treatability Test Statement of Work (TTSOW).

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<sup>2</sup> This guidance permits, in general, the party performing the RI/FS to perform the reuse assessment. EPA can determine the appropriate level of oversight when PRPs perform the reuse assessment.

<sup>3</sup> OSWER Directive No. 9340.1-02, “Revised Policy on Performance of Risk Assessments During Remedial Investigation/Feasibility Studies (RI/FS) Conducted by Potentially Responsible Parties,” permits PRPs to perform the baseline risk assessment where appropriate. Consult the policy document for criteria for deciding whether or not to allow the PRPs to perform the risk assessment.

- (3) **Treatability Test Work Plan.** Within \_\_\_ days after submission of the TTSOW, Respondents shall submit a Treatability Test Work Plan, including a schedule.
- (4) **Treatability Study Sampling and Analysis Plan.** Within \_\_\_ days after identification of the need for a separate or revised QAPP or FSP, Respondents shall submit a Treatability Study Sampling and Analysis Plan.
- (5) **Treatability Study Evaluation Report.** Within \_\_\_ days after completion of any treatability testing, Respondents shall submit a treatability study evaluation report as provided in the SOW and RI/FS Work Plan.

j. **Treatability Study Health and Safety Plan.** Within \_\_\_ days after the identification of the need for a revised Health and Safety Plan, Respondents shall submit a Treatability Study Health and Safety Plan.

k. **Development and Screening of Alternatives.** Respondents shall develop an appropriate range of waste management options that will be evaluated through the development and screening of alternatives, as provided in the SOW and RI/FS Work Plan. In accordance with the schedules or deadlines established in this Order, the attached SOW, and/or the EPA-approved RI/FS Work Plan, Respondents shall provide EPA with the following deliverables for review and approval pursuant to Section XII (Submission and Approval of Deliverables):

- (1) **Memorandum on Remedial Action Objectives.** The Memorandum on Remedial Action Objectives shall include remedial action objectives for Engineering Controls as well as for Institutional Controls.
- (2) **Memorandum on Development and Screening of Alternatives.** The Memorandum on Development and Screening of Alternatives shall summarize the development and screening of remedial alternatives.

l. **Detailed Analysis of Alternatives.** Respondents shall conduct a detailed analysis of remedial alternatives, as described in the SOW and RI/FS Work Plan. In accordance with the deadlines or schedules established in this Order, the attached SOW, and/or the EPA-approved RI/FS Work Plan, Respondents shall provide EPA with the following deliverables for review and approval pursuant to Section XII (Submission and Approval of Deliverables):

- (1) **Individual Analysis of Alternatives.** Within \_\_\_ days after [insert appropriate milestone], Respondents shall conduct an assessment of individual alternatives against each of the nine evaluation criteria, as described in the SOW, and prepare a summary report.

- (2) **Comparative Analysis of Alternatives.** Within \_\_\_ days after [insert appropriate milestone], Respondents shall conduct a comparative analysis of alternatives to evaluate the relative performance of each alternative in relation to the nine evaluation criteria, as described in the SOW, and prepare a summary report.
- (3) Within \_\_\_ days after [insert appropriate milestone], Respondents shall prepare a summary report of the findings of the FS, including the above analyses, and present the results to EPA.
- (4) **Alternatives Analysis for Institutional Controls and Screening.** Respondents shall submit a memorandum on the ICs identified in the Memorandum on Development and Screening of Alternatives as potential remedial actions. The Alternatives Analysis for ICs and Screening shall (i) describe the restrictions needed on land, water, or other resources and their relationship to the remedial action objectives; (ii) determine the specific types of ICs that can be used to address and implement the land, water, or other resource use restrictions; (iii) investigate when the ICs need to be implemented and how long they must remain in place; (iv) research, discuss, and document any agreement or other arrangements with the proper entities (e.g., state, local government, local landowners, conservation organizations, Respondents) on exactly who will be responsible for implementing, maintaining, and enforcing the ICs.<sup>4</sup> The Alternatives Analysis for ICs and Screening shall also evaluate the ICs identified in the Memorandum on Development and Screening of Alternatives against the nine evaluation criteria outlined in the NCP (40 C.F.R. § 300.430(e)(9)(iii)) for CERCLA cleanups, including but not limited to, costs to implement, maintain, and/or enforce the ICs.<sup>5</sup> The Alternatives Analysis for ICs and Screening shall be submitted as an appendix to the draft Feasibility Study Report (“FS Report”).

m. **Draft FS Report.** Within \_\_\_ days after the presentation to EPA described in Paragraph 30.l(1), Respondents shall submit to EPA a draft FS Report for review and approval pursuant to Section XII (Submission and Approval of Deliverables). Respondents shall refer to Table 6-5 of the RI/FS Guidance for report content and format. The draft FS Report as amended, and the administrative record, shall provide the basis for the proposed plan under Sections 113(k)

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<sup>4</sup> See “Institutional Controls: A Site Manager’s Guide to Identifying, Evaluating and Selecting Institutional Controls at Superfund and RCRA Corrective Action Cleanups” (“A Site Manager’s Guide to ICs”), OSWER Directive 9355.0-74FS-P (September 2000) and “Institutional Controls: A Guide to Planning, Implementing, Maintaining, and Enforcing Institutional Controls at Contaminated Sites” (“PIME IC Guide”), OSWER Directive 9355.0-89 (November 2010) for guidance on these considerations.

<sup>5</sup> See A Site Manager’s Guide to ICs, *id.*, for discussion of what factors to consider with respect to evaluation of ICs under the nine criteria. It is not necessary to evaluate “reduction of toxicity, mobility or volume through treatment” in the context of ICs. See the PIME IC Guide, *id.*, for further discussion of ICs lifecycle considerations.

and 117(a) of CERCLA, 42 U.S.C. §§ 9613(k) and 9617(a), by EPA, and shall document the development and analysis of remedial alternatives.] **[End of Alternative 2]**

31. Upon receipt of the draft Feasibility Study Report (“FS Report”), EPA will evaluate, as necessary, the estimates of the risk to the public and environment that are expected to remain after a particular remedial alternative has been completed and will evaluate the cost, implementability, and long-term effectiveness of any proposed ICs for that alternative.

**32. Modification of the RI/FS Work Plan**

a. If at any time during the RI/FS process, Respondents identify a need for additional data, Respondents shall submit a memorandum documenting the need for additional data to EPA’s Project Coordinator within \_\_\_\_ days after identification. EPA in its discretion will determine whether the additional data will be collected by Respondents and whether it will be incorporated into deliverables.

b. In the event of unanticipated or changed circumstances at the Site, Respondents shall notify EPA’s Project Coordinator by telephone within 24 hours of discovery of the unanticipated or changed circumstances. In the event that EPA determines that the unanticipated or changed circumstances warrant changes in the RI/FS Work Plan, EPA shall modify the RI/FS Work Plan in writing accordingly or direct Respondents to modify and submit the modified RI/FS Work Plan to EPA for approval. Respondents shall perform the RI/FS Work Plan as modified.

c. EPA may determine that, in addition to tasks defined in the initially approved RI/FS Work Plan, other additional work may be necessary to accomplish the objectives of the RI/FS. Respondents shall perform these response actions in addition to those required by the initially approved RI/FS Work Plan, including any approved modifications, if EPA determines that such actions are necessary for a thorough RI/FS.

d. Respondents shall complete the additional work according to the standards, specifications, and schedule set forth or approved by EPA in a written modification to the RI/FS Work Plan or written RI/FS Work Plan supplement. EPA reserves the right to conduct the work itself, to seek reimbursement from Respondents for the costs incurred in performing the work, and/or to seek any other appropriate relief.

e. Nothing in this Paragraph shall be construed to limit EPA’s authority to require performance of further response actions at the Site.

**33. Off-Site Shipments**

a. Respondents may ship hazardous substances, pollutants, and contaminants from the Site to an off-Site facility only if they comply with Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), and 40 C.F.R. § 300.440. Respondents will be deemed to be in compliance with CERCLA § 121(d)(3) and 40 C.F.R. § 300.440 regarding a shipment if Respondents obtain a prior determination from EPA that the proposed receiving facility for such shipment is acceptable under the criteria of 40 C.F.R. § 300.440(b).



b. Respondents may ship Waste Material from the Site to an out-of-state waste management facility only if, prior to any shipment, they provide written notice to the appropriate state environmental official in the receiving facility's state and to EPA's Project Coordinator. This notice requirement shall not apply to any off-Site shipments when the total quantity of all such shipments will not exceed ten cubic yards. The written notice must include the following information, if available: (1) the name and location of the receiving facility; (2) the type and quantity of Waste Material to be shipped; (3) the schedule for the shipment; and (4) the method of transportation. Respondents shall also notify the state environmental official referenced above and EPA's Project Coordinator of any major changes in the shipment plan, such as a decision to ship the Waste Material to a different out-of-state facility. Respondents shall provide the written notice after the award of the contract for the RI/FS and before the Waste Material is shipped.

c. Respondents may ship Investigation Derived Waste (IDW) from the Site to an off-Site facility only if they comply with Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), 40 C.F.R. § 300.440, EPA's "Guide to Management of Investigation Derived Waste," OSWER 9345.3-03FS (Jan. 1992), and any IDW-specific requirements contained in the SOW. Wastes shipped off-Site to a laboratory for characterization, and RCRA hazardous wastes that meet the requirements for an exemption from RCRA under 40 C.F.R. § 261.4(e) shipped off-Site for treatability studies, are not subject to 40 C.F.R. § 300.440.

**[NOTE: Paragraphs 34 and 35 below may be modified on a site-by-site basis to reflect Site needs and Regional practice.]**

34. **Meetings.** Respondents shall make presentations at, and participate in, meetings at the request of EPA during the preparation of the RI/FS. In addition to discussion of the technical aspects of the RI/FS, topics will include anticipated problems or new issues. Meetings will be scheduled at EPA's discretion.

35. **Progress Reports.** In addition to the deliverables set forth in this Order, Respondents shall submit written [monthly] progress reports to EPA by the \_\_\_ day of the following month. At a minimum, with respect to the preceding month, these progress reports shall:

- a. describe the actions that have been taken to comply with this Order;
- b. include all results of sampling and tests and all other data received by Respondents;
- c. describe Work planned for the next two months with schedules relating such Work to the overall project schedule for RI/FS completion; and
- d. describe all problems encountered in complying with the requirements of this Order and any anticipated problems, any actual or anticipated delays, and solutions developed and implemented to address any actual or anticipated problems or delays.

## **XII. SUBMISSION AND APPROVAL OF DELIVERABLES**

### **36. Submission of Deliverables**

#### **a. General Requirements for Deliverables**

- (1) Except as otherwise provided in this Order, Respondents shall direct all submissions required by this Order to EPA's Project Coordinator **[insert EPA Project Coordinator's name, address, phone number, email]** and to the State at **[insert contact information]**. Respondents shall submit all deliverables required by this Order [the attached SOW,] or any approved work plan in accordance with the schedule set forth in such plan.
- (2) Respondents shall submit all deliverables in electronic form. Technical specifications for sampling and monitoring data and spatial data are addressed in Paragraph 36.b. All other deliverables shall be submitted in the electronic form specified by EPA'S Project Coordinator. If any deliverable includes maps, drawings, or other exhibits that are larger than 8.5 x 11 inches. Respondents shall also provide paper copies of such exhibits. **[NOTE: If paper copies of specific deliverables (in addition to large exhibits) are needed, this paragraph should be edited accordingly.]**

#### **b. Technical Specifications for Deliverables**

**[NOTE: The information in this paragraph is consistent with the EPA National Geospatial Data Policy 2008, which is under review and may be revised at any time. The case team should check <https://www.epa.gov/geospatial/geospatial-policies-and-standards> for the latest guidance on the policy and associated EPA and CERCLA procedures and technical specifications, including standards and quality assurance for geographic information system (GIS) deliverables.]**

- (1) Sampling and monitoring data should be submitted in standard regional Electronic Data Deliverable (EDD) format. **[Specify the EDD format that the Region uses.]** Other delivery methods may be allowed if electronic direct submission presents a significant burden or as technology changes.
- (2) Spatial data, including spatially-referenced data and geospatial data, should be submitted: (i) in the ESRI File Geodatabase format **[or insert Regionally-preferred spatial file format]**; and (ii) as unprojected geographic coordinates in decimal degree format using North American Datum 1983 (NAD83) or World Geodetic System 1984 (WGS84) as the datum. If applicable, submissions should include the collection method(s). Projected coordinates may optionally be included but must be documented. Spatial data should be accompanied by metadata, and such metadata should be

compliant with the Federal Geographic Data Committee (FGDC) Content Standard for Digital Geospatial Metadata and its EPA profile, the EPA Geospatial Metadata Technical Specification. An add-on metadata editor for ESRI software, the EPA Metadata Editor (EME), complies with these FGDC and EPA metadata requirements and is available at <https://edg.epa.gov/EME/>.

- (3) Each file must include an attribute name for each site unit or sub-unit submitted. Consult <https://www.epa.gov/geospatial/geospatial-policies-and-standards> for any further available guidance on attribute identification and naming.
- (4) Spatial data submitted by Respondents does not, and is not intended to, define the boundaries of the Site.

### 37. **Approval of Deliverables**

#### a. **Initial Submissions**

- (1) After review of any deliverable that is required to be submitted for EPA approval under this Order [**insert if applicable:** or the attached SOW], EPA shall: (i) approve, in whole or in part, the submission; (ii) approve the submission upon specified conditions; (iii) disapprove, in whole or in part, the submission; or (iv) any combination of the foregoing.
- (2) EPA also may modify the initial submission to cure deficiencies in the submission if: (i) EPA determines that disapproving the submission and awaiting a resubmission would cause substantial disruption to the Work; or (ii) previous submission(s) have been disapproved due to material defects and the deficiencies in the initial submission under consideration indicate a bad faith lack of effort to submit an acceptable deliverable.

b. **Resubmissions.** Upon receipt of a notice of disapproval under Paragraph 37.a(1) (Initial Submissions), or if required by a notice of approval upon specified conditions under Paragraph 37.a(1), Respondents shall, within \_\_\_ days or such longer time as specified by EPA in such notice, correct the deficiencies and resubmit the deliverable for approval. After review of the resubmitted deliverable, EPA may: (a) approve, in whole or in part, the resubmission; (b) approve the resubmission upon specified conditions; (c) modify the resubmission; (d) disapprove, in whole or in part, the resubmission, requiring Respondents to correct the deficiencies; or (e) any combination of the foregoing.

c. **Implementation.** Upon approval, approval upon conditions, or modification by EPA under Paragraph 37.a (Initial Submissions) or Paragraph 37.b (Resubmissions), of any deliverable, or any portion thereof: (i) such deliverable, or portion thereof, will be incorporated into and enforceable under the Order; and (ii) Respondents shall take any action required by such deliverable, or portion thereof. Implementation of any non-

deficient portion of a submission shall not relieve Respondents of any liability for penalties under Section XX (Enforcement/Work Takeover) for violations of this Order.

38. Notwithstanding the receipt of a notice of disapproval, Respondents shall proceed to take any action required by any non-deficient portion of the submission, unless otherwise directed by EPA.

39. In the event that EPA takes over some of the tasks, but not the preparation of the Remedial Investigation Report ("RI Report") or the FS Report, Respondents shall incorporate and integrate information supplied by EPA into those reports.

40. Respondents shall not proceed with any activities or tasks dependent on the following deliverables until receiving EPA approval, approval on condition, or modification of such deliverables: RI/FS Work Plan; Sampling and Analysis Plan; draft RI Report; Treatability Testing Work Plan; Treatability Testing Sampling and Analysis Plan; Treatability Testing Health and Safety Plan [**delete any of the foregoing not required as a deliverable and add any additional deliverables, if desired**]; and draft FS Report. While awaiting EPA approval, approval on condition, or modification of these deliverables, Respondents shall proceed with all other tasks and activities that may be conducted independently of these deliverables, in accordance with the schedule set forth under this Order.

41. For all remaining deliverables not listed in Paragraph 40, Respondents shall proceed with all subsequent tasks, activities, and deliverables without awaiting EPA approval of the submitted deliverable. EPA reserves the right to stop Respondents from proceeding further, either temporarily or permanently, on any task, activity, or deliverable at any point during the Work.

42. **Material Defects.** If an initially submitted or resubmitted plan, report, or other deliverable contains a material defect, and the plan, report, or other deliverable is disapproved or modified by EPA under Paragraph 37.a (Initial Submissions) or 37.b (Resubmissions) due to such material defect, Respondents shall be deemed in violation of this Order for failure to submit such plan, report, or other deliverable timely and adequately. Respondents may be subject to penalties for such violation as provided in Section XX (Enforcement/Work Takeover).

43. Neither failure of EPA to expressly approve or disapprove of Respondents' submissions within a specified time period, nor the absence of comments, shall be construed as approval by EPA.

### **XIII. QUALITY ASSURANCE, SAMPLING, AND DATA ANALYSIS**

44. Respondents shall use quality assurance, quality control, and other technical activities and chain of custody procedures for all samples consistent with "EPA Requirements for Quality Assurance Project Plans (QA/R5)," EPA/240/B-01/003, March 2001 (reissued May 2006), "Guidance for Quality Assurance Project Plans (QA/G-5)," EPA/240/R-02/009 (December 2002), and "Uniform Federal Policy for Quality Assurance Project Plans, Parts 1-3," EPA/505/B-04/900A-900C (March 2005).

45. **Laboratories**

a. Respondents shall ensure that EPA [and State] personnel and its [their] authorized representatives are allowed access at reasonable times to all laboratories utilized by Respondents pursuant to this Order. In addition, Respondents shall ensure that such laboratories shall analyze all samples submitted by EPA pursuant to the Quality Assurance Project Plan (QAPP) for quality assurance, quality control, and technical activities that will satisfy the stated performance criteria as specified in the QAPP and that sampling and field activities are conducted in accordance with EPA's "Field Operations Group Operational Guidelines for Field Activities"

(<http://www.epa.gov/region8/qa/FieldOperationsGroupOperationalGuidelinesForFieldActivities.pdf>) and "EPA QA Field Activities Procedure" CIO 2105-P-02.1 (9/23/2014), available at <https://www.epa.gov/irmpoli8/epa-qa-field-activities-procedures>. Respondents shall ensure that the laboratories they utilize for the analysis of samples taken pursuant to this Order meet the competency requirements set forth in EPA's "Policy to Assure Competency of Laboratories, Field Sampling, and Other Organizations Generating Environmental Measurement Data under Agency-Funded Acquisitions," available at <https://www.epa.gov/measurements/documents-about-measurement-competency-under-acquisition-agreements>, and that the laboratories perform all analyses using EPA-accepted methods. Accepted EPA methods consist of, but are not limited to, methods that are documented in the EPA's Contract Laboratory Program (<https://www.epa.gov/superfund/programs/clp/>), SW 846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (<https://www.epa.gov/hw-sw846>), "Standard Methods for the Examination of Water and Wastewater" (<http://www.standardmethods.org/>), and 40 C.F.R. Part 136, "Air Toxics - Monitoring Methods" (<https://www.epa.gov/ttnamti1/airtox.html>).

b. Upon approval by EPA [, after a reasonable opportunity for review and comment by the State], Respondents may use other appropriate analytical methods, as long as (i) quality assurance/quality control (QA/QC) criteria are contained in the methods and the methods are included in the QAPP, (ii) the analytical methods are at least as stringent as the methods listed above, and (iii) the methods have been approved for use by a nationally recognized organization responsible for verification and publication of analytical methods, e.g., EPA, ASTM, NIOSH, OSHA, etc.

c. Respondents shall ensure that all laboratories they use for analysis of samples taken pursuant to this Order have a documented Quality System that complies with ASQ/ANSI E4:2014 "Quality Management Systems for Environmental Information and Technology Programs – Requirements With Guidance for Use" (American Society for Quality, February 2014), and "EPA Requirements for Quality Management Plans (QA/R-2)" EPA/240/B-01/002 (March 2001, reissued May 2006), or equivalent documentation as determined by EPA. EPA may consider Environmental Response Laboratory Network (ERLN) laboratories, laboratories accredited under the National Environmental Laboratory Accreditation Program (NELAP), or laboratories that meet International Standardization Organization (ISO 17025) standards or other nationally recognized programs as meeting the Quality System requirements.

d. Respondents shall ensure that all field methodologies utilized in collecting samples for subsequent analysis pursuant to this Order are conducted in accordance with the procedures set forth in the approved QAPP.

#### 46. **Sampling**

a. Upon request, Respondents shall provide split or duplicate samples to EPA [and the State] or its [their] authorized representatives. Respondents shall notify EPA [and the State] not less than [7] days in advance of any sample collection activity. In addition, EPA [and the State] shall have the right to take any additional samples that EPA [or the State] deem[s] necessary. Upon request, EPA [and the State] shall provide to Respondents split or duplicate samples of any samples it [they] take[s] as part of EPA's oversight of Respondents' implementation of the Work, and any such samples shall be analyzed in accordance with the approved QAPP.

b. Respondents shall submit to EPA [and the State], in the next monthly progress report as described in Paragraph 35 (Progress Reports) the results of all sampling and/or tests or other data obtained or generated by or on behalf of Respondents with respect to the Site and/or the implementation of this Order.

#### **XIV. PROPERTY REQUIREMENTS**

**[NOTE: Here and in other places in this Section, optional text to be used if there is an Owner Respondent is set off in brackets.]**

47. **Agreements Regarding Access and Non-Interference.** Respondents shall, with respect to any Non-Respondent Owner's Affected Property, use best efforts to secure from such Non-Respondent Owner an agreement, enforceable by Respondents and by EPA, providing that such Non-Respondent Owner **[if Owner Respondent: , and Owner Respondent shall, with respect to Owner Respondent's Affected Property]:** (i) provide EPA [, the State,] and the other Respondents, and their representatives, contractors, and subcontractors with access at all reasonable times to such Affected Property to conduct any activity regarding the Order, including those listed in Paragraph 47.a (Access Requirements); and (ii) refrain from using such Affected Property in any manner that EPA determines will [pose an unacceptable risk to human health or to the environment due to exposure to Waste Material, or] interfere with or adversely affect the implementation or integrity of the Work **[use if applicable: , including the restrictions listed in Paragraph 47.b (Land, Water, or Other Resource Use Restrictions)].**

a. **Access Requirements.** The following is a list of activities for which access is required regarding the Affected Property:

**[NOTE: Augment this list as appropriate.]**

- (1) Monitoring the Work;
- (2) Verifying any data or information submitted to EPA [or the State];
- (3) Conducting investigations regarding contamination at or near the Site;
- (4) Obtaining samples;
- (5) Assessing the need for, planning, implementing, or monitoring response actions;

- (6) Assessing implementation of quality assurance and quality control practices as defined in the approved QAPP;
- (7) Implementing the Work pursuant to the conditions set forth in Paragraph 68 (Work Takeover);
- (8) Inspecting and copying records, operating logs, contracts, or other documents maintained or generated by Respondents or their agents, consistent with Section XV (Access to Information);
- (9) Assessing Respondents' compliance with the Order;
- (10) Determining whether the Affected Property is being used in a manner that is prohibited or restricted, or that may need to be prohibited or restricted under the Order; and
- (11) Implementing, monitoring, maintaining, reporting on, and enforcing any land, water, or other resource use restrictions regarding the Affected Property.

**[NOTE: Include Paragraph 47.b if land, water, or other resource use restrictions are needed. If proprietary controls selected in an action memorandum are required to restrict land, water, or other resource use during performance of the RI/FS, consult Appendix A, Optional Model Institutional Controls Language of the "Model Unilateral Administrative Order For Removal Actions"**

**([https://cfpub.epa.gov/compliance/models/view.cfm?model\\_ID=755](https://cfpub.epa.gov/compliance/models/view.cfm?model_ID=755)) for appropriate language.]**

b. **[Land, Water, or Other Resource Use Restrictions.** The following is a list of land, water, or other resource use restrictions applicable to the Affected Property:

**[NOTE: Customize and augment this list as appropriate. Be as specific as possible.]**

- (1) Prohibiting the following activities that could interfere with the Work: \_\_\_\_\_; and
- (2) Ensuring that any new structures will not be constructed in the following manner that could interfere with the Work: \_\_\_\_\_.]

48. **Best Efforts.** As used in this Section, "best efforts" means the efforts that a reasonable person in the position of Respondents would use so as to achieve the goal in a timely manner, including the cost of employing professional assistance and the payment of reasonable sums of money to secure access and/or use restriction agreements, as required by this Section. If, within \_\_\_ days after the Effective Date, Respondents are unable to accomplish what is required through "best efforts," they shall notify EPA, and include a description of the steps taken to comply with the requirements. If EPA deems it appropriate, it may assist Respondents, or take independent action, in obtaining such access and/or use restrictions. EPA reserves the right to seek payment from Respondents for all costs, including cost of attorneys' time, incurred by the

United States in obtaining such access or agreements to restrict land, water, or other resource use.

49. **[Insert if needed: Notice to Successors-in-Title]**

a. Owner Respondent shall, within 15 days after the Effective Date, submit for EPA approval a notice to be filed regarding Owner Respondent's Affected Property in the appropriate land records. The notice must: (1) include a proper legal description of the Affected Property; (2) provide notice to all successors-in-title: (i) that the Affected Property is part of, or related to, the Site; (ii) that EPA determined that an RI/FS must be performed at the Site; and (iii) that EPA has issued an order to potentially responsible parties requiring implementation of such RI/FS; and (3) identify this Order and the date this Order was issued by EPA. Owner Respondent shall record the notice within 10 days after EPA's approval of the notice and submit to EPA, within 10 days thereafter, a certified copy of the recorded notice.

b. Owner Respondent shall, prior to entering into a contract to Transfer Owner Respondent's Affected Property, or 60 days prior to Transferring Owner Respondent's Affected Property, whichever is earlier:

- (1) Notify the proposed transferee that EPA has determined that an RI/FS must be performed at the Site, and that EPA has issued an order to potentially responsible parties requiring implementation of such RI/FS, and identifying this Order and the date it was issued by EPA; and
- (2) Notify EPA of the name and address of the proposed transferee and provide EPA with a copy of the notice that it provided to the proposed transferee.]

50. In the event of any Transfer of the Affected Property, unless EPA otherwise consents in writing, Respondents shall continue to comply with their obligations under the Order, including their obligation to secure access and ensure compliance with any land, water or other resource use restrictions regarding the Affected Property.

51. Notwithstanding any provision of this Order, EPA [and the State] retain[s] all of its [their] access authorities and rights, as well as all of its [their] rights to require land, water, or other resource use restrictions, including enforcement authorities related thereto, under CERCLA, RCRA, and any other applicable statute or regulations.

## **XV. ACCESS TO INFORMATION**

52. Respondents shall provide to EPA [and the State], upon request, copies of all records, reports, documents, and other information (including records, reports, documents, and other information in electronic form) (hereinafter referred to as "Records") within Respondents' possession or control or that of their contractors or agents relating to activities at the Site or to the implementation of this Order, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information regarding the Work. Respondents shall also



make available to EPA [and the State], for purposes of investigation, information gathering, or testimony, their employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

### **53. Privileged and Protected Claims**

a. Respondents may assert that all or part of a Record requested by EPA [or the State] is privileged or protected as provided under federal law, in lieu of providing the Record, provided Respondents comply with Paragraph 53.b, and except as provided in Paragraph 53.b.

b. If Respondents assert a claim of privilege or protection, they shall provide EPA [and the State] with the following information regarding such Record: its title; its date; the name, title, affiliation (e.g., company or firm), and address of the author, of each addressee, and of each recipient; a description of the Record's contents; and the privilege or protection asserted. If a claim of privilege or protection applies only to a portion of a Record, Respondents shall provide the Record to EPA [and the State] in redacted form to mask the privileged or protected portion only. Respondents shall retain all Records that they claim to be privileged or protected until EPA [and the State] or a court determines that such Record is privileged or protected.

c. Respondents may make no claim of privilege or protection regarding: (1) any data regarding the Site, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, radiological, or engineering data, or the portion of any other Record that evidences conditions at or around the Site; or (2) the portion of any Record that Respondents are required to create or generate pursuant to this Order.

**54. Business Confidential Claims.** Respondents may assert that all or part of a Record provided to EPA [and the State] under this Section or Section XVI (Record Retention) is business confidential to the extent permitted by and in accordance with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), and 40 C.F.R. § 2.203(b). Respondents shall segregate and clearly identify all Records or parts thereof submitted under this Order for which Respondents assert business confidentiality claims. Records claimed as confidential business information will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies Records when they are submitted to EPA [and the State], or if EPA has notified Respondents that the Records are not confidential under the standards of Section 104(e)(7) of CERCLA or 40 C.F.R. Part 2, Subpart B, the public may be given access to such Records without further notice to Respondents.

**55.** Notwithstanding any provision of this Order, EPA [and the State] retain[s] all of its [their] information gathering and inspection authorities and rights, including enforcement actions related thereto, under CERCLA, RCRA, and any other applicable statutes or regulations.

## **XVI. RECORD RETENTION**

**56.** During the pendency of this Order and for a minimum of 10 years after Respondents' receipt of EPA's notification pursuant to Section XXVII (Notice of Completion of Work), each Respondent shall preserve and retain all non-identical copies of Records (including Records in electronic form) now in its possession or control, or that come into its possession or

control, that relate in any manner to its liability under CERCLA with respect to the Site, provided, however, that Respondents who are potentially liable as owners or operators of the Site must retain, in addition, all Records that relate to the liability of any other person under CERCLA with respect to the Site. Each Respondent must also retain, and instruct its contractors and agents to preserve, for the same period of time specified above, all non-identical copies of the last draft or final version of any Records (including Records in electronic form) now in its possession or control or that come into its possession or control that relate in any manner to the performance of the Work, provided, however, that each Respondent (and its contractors and agents) must retain, in addition, copies of all data generated during performance of the Work and not contained in the aforementioned Records required to be retained. Each of the above record retention requirements shall apply regardless of any corporate retention policy to the contrary.

57. At the conclusion of this document retention period, Respondents shall notify EPA [and the State] at least 90 days prior to the destruction of any such Records, and, upon request by EPA [or the State], and except as provided in Paragraph 53 (Privileged and Protected Claims), Respondents shall deliver any such Records to EPA [or the State].

58. Within \_\_ days after the Effective Date, each Respondent shall submit a written certification to EPA's Project Coordinator that, to the best of its knowledge and belief, after thorough inquiry, it has not altered, mutilated, discarded, destroyed, or otherwise disposed of any Records (other than identical copies) relating to its potential liability regarding the Site since notification by the United States or the State, and that it has fully complied with any and all EPA and State requests for information regarding the Site pursuant to Sections 104(e) and 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) and 9622(e), and Section 3007 of RCRA, 42 U.S.C. § 6927, and state law. Any Respondent unable to so certify shall submit a modified certification that explains in detail why it is unable to certify in full with regard to all Records.

## **XVII. COMPLIANCE WITH OTHER LAWS**

59. Nothing in this Order limits Respondent's obligations to comply with the requirements of all applicable state and federal laws and regulations, except as provided in Section 121(e) of CERCLA, 42 U.S.C. § 9621(e), and 40 C.F.R. §§ 300.400(e) and 300.415(j). In accordance with 40 C.F.R. § 300.415(j), all on-site actions required pursuant to this Order shall, to the extent practicable, as determined by EPA, considering the exigencies of the situation, attain applicable or relevant and appropriate requirements (ARARs) under federal environmental or state environmental or facility siting laws.

60. No local, state, or federal permit shall be required for any portion of the Work conducted entirely on-site (i.e., within the areal extent of contamination or in very close proximity to the contamination and necessary for implementation of the Work), including studies, if the action is selected and carried out in compliance with Section 121 of CERCLA, 42 U.S.C. § 9621. Where any portion of the Work that is not on-site requires a federal or state permit or approval, Respondents shall submit timely and complete applications and take all other actions necessary to obtain and to comply with all such permits or approvals. This Order is not, and shall not be construed to be, a permit issued pursuant to any federal or state statute or regulation.

## **XVIII. EMERGENCY RESPONSE AND NOTIFICATION OF RELEASES**

61. **Emergency Response.** If any event occurs during performance of the Work that causes or threatens to cause a release of Waste Material on, at, or from the Site that either constitutes an emergency situation or that may present an immediate threat to public health or welfare or the environment, Respondents shall immediately take all appropriate action to prevent, abate, or minimize such release or threat of release. Respondents shall take these actions in accordance with all applicable provisions of this Order, including, but not limited to, the Health and Safety Plan. Respondents shall also immediately notify EPA's Project Coordinator or, in the event of his/her unavailability, the Regional Duty Officer at **[insert Regional spill phone number]** of the incident or Site conditions. In the event that Respondents fail to take appropriate response action as required by this Paragraph, and EPA takes such action instead, EPA reserves the right to pursue cost recovery.

62. **Release Reporting.** Upon the occurrence of any event during performance of the Work that Respondents are required to report pursuant to Section 103 of CERCLA, 42 U.S.C. § 9603, or Section 304 of the Emergency Planning and Community Right-To-Know Act (EPCRA), 42 U.S.C. § 11004, Respondents shall immediately orally notify EPA's Project Coordinator, or, in the event of his/her unavailability, the Regional Duty Officer at **[insert Regional spill phone number]** and the National Response Center at (800) 424-8802. This reporting requirement is in addition to, and not in lieu of, reporting under Section 103(c) of CERCLA, 42 U.S.C. § 9603(c), and Section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. § 11004.

63. For any event covered under this Section, Respondents shall submit a written report to EPA within 7 days after the onset of such event, setting forth the action or event that occurred and the measures taken, and to be taken, to mitigate any release or threat of release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release or threat of release.

## **XIX. PAYMENT OF RESPONSE COSTS**

**[NOTE: Regions have discretion to include this section consistent with Regional practice and in light of site-specific circumstances.]**

64. Upon EPA's written demand, Respondents shall pay EPA all Response Costs incurred or to be incurred in connection with this Order. On a periodic basis, EPA will send Respondents a bill requiring payment of all Response Costs incurred by the United States with respect to this Order that includes a **[insert name of standard Regionally-prepared cost summary]**, which includes direct and indirect costs incurred by EPA, its contractors, and the Department of Justice.

65. Respondents shall make all payments within 30 days after receipt of each written demand requiring payment. Payment shall be made to EPA by Fedwire Electronic Funds Transfer (EFT) to:

Federal Reserve Bank of New York  
ABA = 021030004

Account = 68010727  
SWIFT address = FRNYUS33  
33 Liberty Street  
New York NY 10045  
Field Tag 4200 of the Fedwire message should read “D 68010727 Environmental Protection Agency”

and shall reference Site/Spill ID Number \_\_\_\_ and the EPA docket number for this action.

**[NOTE: Regions may substitute the following instructions for payment by Automated Clearinghouse (ACH) or for online payment:**

**For ACH payment:**

Respondents shall make payment to EPA by Automated Clearinghouse (ACH) to:

PNC Bank  
808 17<sup>th</sup> Street, NW  
Washington, DC 20074  
Contact – Jesse White 301-887-6548  
ABA = 051036706  
Transaction Code 22 - checking  
Environmental Protection Agency  
Account 310006  
CTX Format

and shall reference Site/Spill ID Number \_\_\_\_ and the EPA docket number for this action.

**For online payment:**

Respondents shall make payment at <https://www.pay.gov> to the U.S. EPA account in accordance with instructions to be provided to Respondents by EPA.]

**[NOTE: If Respondents have difficulty making EFT, ACH, or online payments, you may substitute the following:** Respondents shall make payment by official bank check made payable to “EPA Hazardous Substance Superfund.” Each check, or a letter accompanying each check, shall identify the name and address of the party(ies) making payment, the Site name, Site/Spill ID Number \_\_\_\_, and the EPA docket number for this action, and shall be sent to:

U.S. Environmental Protection Agency  
Superfund Payments  
Cincinnati Finance Center  
PO Box 979076  
St. Louis, MO 63197-9000]

66. At the time of payment, Respondents shall send notice that payment has been made to **[insert name and address of EPA’s Project Coordinator or other receiving official**

**in Region]**, and to the EPA Cincinnati Finance Office by email at cinwd\_acctsreceivable@epa.gov, or by mail to

EPA Cincinnati Finance Office  
26 W. Martin Luther King Drive  
Cincinnati, Ohio 45268

Such notice shall reference Site/Spill ID Number \_\_\_\_\_ and the EPA docket number for this action.

67. In the event that the payments for Response Costs are not made within 30 days after Respondents' receipt of a written demand requiring payment, Respondents shall pay Interest on the unpaid balance. The Interest on Response Costs shall begin to accrue on the date of the written demand and shall continue to accrue until the date of payment. Payments of Interest made under this Paragraph shall be in addition to such other remedies or sanctions available to the United States by virtue of Respondents' failure to make timely payments under this Section. Respondents shall make all payments required by this Paragraph in the manner described in Paragraphs 65 and 66.

## **XX. ENFORCEMENT/WORK TAKEOVER**

68. Any willful violation, or failure or refusal to comply with any provision of this Order may subject Respondents to civil penalties of up to \$53,907 per violation per day, as provided in Section 106(b)(1) of CERCLA, 42 U.S.C. § 9606(b)(1), and the Civil Monetary Penalty Inflation Adjustment Rule, 81 Fed. Reg. 43,091, 40 C.F.R. Part 19.4. In the event of such willful violation, or failure or refusal to comply, EPA may carry out the required actions unilaterally, pursuant to Section 104 of CERCLA, 42 U.S.C. § 9604, and/or may seek judicial enforcement of this Order pursuant to Section 106 of CERCLA, 42 U.S.C. § 9606. **[Include the following sentence if Section XXIV (Financial Assurance) is included in the Order:** In addition, nothing in this Order shall limit EPA's authority under Section XXIV (Financial Assurance).] Respondents may also be subject to punitive damages in an amount up to three times the amount of any costs incurred by the United States as a result of such failure to comply, as provided in Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3).

## **XXI. RESERVATIONS OF RIGHTS BY EPA**

69. Nothing in this Order shall limit the power and authority of EPA or the United States to take, direct, or order all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants, or contaminants, or hazardous or solid waste on, at, or from the Site. Further, nothing in this Order shall prevent EPA from seeking legal or equitable relief to enforce the terms of this Order, from taking other legal or equitable action as it deems appropriate and necessary, or from requiring Respondents in the future to perform additional activities pursuant to CERCLA or any other applicable law. EPA reserves the right to bring an action against Respondents under Section 107 of CERCLA, 42 U.S.C. § 9607, for recovery of any response costs incurred by the United States related to this Order or the Site [and not paid by Respondents].

## XXII. OTHER CLAIMS

70. By issuance of this Order, the United States and EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondents. The United States or EPA shall not be deemed a party to any contract entered into by Respondents or their directors, officers, employees, agents, successors, representatives, assigns, contractors, or consultants in carrying out actions pursuant to this Order.

71. Nothing in this Order constitutes a satisfaction of or release from any claim or cause of action against Respondents or any person not a party to this Order, for any liability such person may have under CERCLA, other statutes, or common law, including but not limited to any claims of the United States under Sections 106 and 107 of CERCLA, 42 U.S.C. §§ 9606 and 9607.

72. Nothing in this Order shall be deemed to constitute preauthorization of a claim within the meaning of Section 111(a)(2) of CERCLA, 42 U.S.C. § 9611(a)(2), or 40 C.F.R. § 300.700(d).

73. No action or decision by EPA pursuant to this Order shall give rise to any right to judicial review, except as set forth in Section 113(h) of CERCLA, 42 U.S.C. § 9613(h).

## XXIII. INSURANCE

74. No later than \_\_\_ days before commencing any on-site Work, Respondents shall secure, and shall maintain for the duration of this Order, commercial general liability insurance with limits of liability of \$1 million per occurrence, automobile liability insurance with limits of liability of \$1 million per accident, and umbrella liability insurance with limits of liability of \$5 million in excess of the required commercial general liability and automobile liability limits, naming EPA as an additional insured with respect to all liability arising out of the activities performed by or on behalf of Respondents pursuant to this Order. Within the same time period, Respondents shall provide EPA with certificates of such insurance and a copy of each insurance policy. Respondents shall submit such certificates and copies of policies each year on the anniversary of the Effective Date. In addition, for the duration of the Order, Respondents shall satisfy, or shall ensure that their contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of worker's compensation insurance for all persons performing Work on behalf of Respondents in furtherance of this Order. If Respondents demonstrate by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering some or all of the same risks but in a lesser amount, then, with respect to that contractor or subcontractor, Respondents need provide only that portion of the insurance described above that is not maintained by the contractor or subcontractor. Respondents shall ensure that all submittals to EPA under this Paragraph identify the [Site name, City, State] and the EPA docket number for this action.

## XXIV. [FINANCIAL ASSURANCE]

**[NOTES ON SECTION XXIV: When determining whether to include this Section in the Order or whether to modify it to limit the form of the financial assurance (FA) to certain mechanisms, case teams should consider the facts and circumstances of each case,**

including: the estimated cost of Work to be performed; the estimated time to complete the Work; the nature and extent of contamination at the Site; whether the financial assurance can be secured before commencement of the Work (or soon thereafter); the industry sectors in which the Respondents operate; and the financial health of the Respondents. Regions are strongly encouraged to include this Section for the more costly and time-consuming RI/FS actions. Case teams can find the most current sample financial assurance documents in the “Financial Assurance - Orders” category on the Cleanup Enforcement Model Language and Sample Documents Database at <https://cfpub.epa.gov/compliance/models/>. When this Section is included in an Order, Regions should examine the form and substance of all financial assurance mechanisms submitted by Respondents, both initially and over time, to ensure consistency and compliance with this Section (e.g., case teams should ensure that entities providing a demonstration or guarantee pursuant to Paragraph 75.d or 75.e have: (a) submitted all required documentation so that EPA can determine whether such financial assurance is adequate; and (b) fully and accurately reflected in their submission all of their financial assurance obligations (under CERCLA, RCRA, and any other federal, state, or tribal environmental obligation) to the United States or other governmental entities so all such obligations have been properly accounted for in determining whether such entity meets the financial test criteria). For more specific information and considerations, see “Guidance on Financial Assurance in Superfund Settlement Agreements and Unilateral Administrative Orders” (April 6, 2015), available at <https://www.epa.gov/enforcement/guidance-financial-assurance-superfund-settlements-and-orders>. Financial assurance team members within the Office of Site Remediation Enforcement are available to assist with any financial assurance matters, including the evaluation of submissions.]

75. In order to ensure completion of the Work, Respondents shall secure financial assurance, initially in the amount of \$[insert initial FA estimate] (“Estimated Cost of the Work”). The financial assurance must be one or more of the mechanisms listed below, in a form substantially identical to the relevant sample documents available from EPA or under the “Financial Assurance - Orders” category on the Cleanup Enforcement Model Language and Sample Documents Database at <https://cfpub.epa.gov/compliance/models/>, and satisfactory to EPA. Respondents may use multiple mechanisms if they are limited to trust funds, surety bonds guaranteeing payment, and/or letters of credit.

a. A trust fund: (1) established to ensure that funds will be available as and when needed for performance of the Work; (2) administered by a trustee that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency; and (3) governed by an agreement that requires the trustee to make payments from the fund only when the [insert appropriate Regional official (e.g., Superfund Division Director)] advises the trustee in writing that: (i) payments are necessary to fulfill the affected Respondents’ obligations under the Order; or (ii) funds held in trust are in excess of the funds that are necessary to complete the performance of Work in accordance with this Order;

b. A surety bond, issued by a surety company among those listed as acceptable sureties on federal bonds as set forth in Circular 570 of the U.S. Department of the Treasury, guaranteeing payment or performance in accordance with Paragraph 81 (Access to Financial Assurance);

c. An irrevocable letter of credit, issued by an entity that has the authority to issue letters of credit and whose letter-of-credit operations are regulated and examined by a federal or state agency, guaranteeing payment in accordance with Paragraph 81 (Access to Financial Assurance);

d. A demonstration by a Respondent that it meets the relevant financial test criteria of Paragraph 78; or

e. A guarantee to fund or perform the Work executed by a company (1) that is a direct or indirect parent company of a Respondent or has a “substantial business relationship” (as defined in 40 C.F.R. § 264.141(h)) with a Respondent; and (2) can demonstrate to EPA’s satisfaction that it meets the financial test criteria of Paragraph 78.

76. **Standby Trust.** If Respondents seek to establish financial assurance by using a surety bond, a letter of credit, or a corporate guarantee, Respondents shall at the same time establish and thereafter maintain a standby trust fund, which must meet the requirements specified in Paragraph 75.a, and into which payments from the other financial assurance mechanism can be deposited if the financial assurance provider is directed to do so by EPA pursuant to Paragraph 81 (Access to Financial Assurance). An originally signed duplicate of the standby trust agreement must be submitted, with the other financial mechanism, to EPA in accordance with Paragraph 77. Until the standby trust fund is funded pursuant to Paragraph 81 (Access to Financial Assurance), neither payments into the standby trust fund nor annual valuations are required.

77. Within **[insert appropriate time period (e.g., 30)]** days after the Effective Date, Respondents shall submit to EPA proposed financial assurance mechanisms in draft form in accordance with Paragraph 75 for EPA’s review. Within **[insert appropriate time period (e.g., 60-90)]** days after the Effective Date, or 30 days after EPA’s approval of the form and substance of Respondents’ financial assurance, whichever is later, Respondents shall secure all executed and/or otherwise finalized mechanisms or other documents consistent with the EPA-approved form of financial assurance and shall submit such mechanisms and documents to the **[insert desired recipient(s) (e.g., Regional Financial Management Officer, Regional financial assurance specialist, Regional attorney, and/or RPM) and relevant contact information if not provided elsewhere in the Order]**.

78. Respondents seeking to provide financial assurance by means of a demonstration or guarantee under Paragraph 75.d or 75.e must, within **[insert appropriate time period]**:

a. Demonstrate that:

(1) the affected Respondent or guarantor has:

i. Two of the following three ratios: a ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities greater than 0.1; and a ratio of current assets to current liabilities greater than 1.5; and



- ii. Net working capital and tangible net worth each at least six times the sum of the Estimated Cost of the Work and the amounts, if any, of other federal, state, or tribal environmental obligations financially assured through the use of a financial test or guarantee; and
- iii. Tangible net worth of at least \$10 million; and
- iv. Assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of the Estimated Cost of the Work and the amounts, if any, of other federal, state, or tribal environmental obligations financially assured through the use of a financial test or guarantee; or

(2) The affected Respondent or guarantor has:

- i. A current rating for its senior unsecured debt of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A or Baa as issued by Moody's; and
- ii. Tangible net worth at least six times the sum of the Estimated Cost of the Work and the amounts, if any, of other federal, state, or tribal environmental obligations financially assured through the use of a financial test or guarantee; and
- iii. Tangible net worth of at least \$10 million; and
- iv. Assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of the Estimated Cost of the Work and the amounts, if any, of other federal, state, or tribal environmental obligations financially assured through the use of a financial test or guarantee; and

b. Submit to EPA for the affected Respondent or guarantor: (1) a copy of an independent certified public accountant's report of the entity's financial statements for the latest completed fiscal year, which must not express an adverse opinion or disclaimer of opinion; and (2) a letter from its chief financial officer and a report from an independent certified public accountant substantially identical to the sample letter and reports available from EPA or under the "Financial Assurance – Orders" subject list category on the Cleanup Enforcement Model Language and Sample Documents Database at <https://cfpub.epa.gov/compliance/models/>.

79. Respondents providing financial assurance by means of a demonstration or guarantee under Paragraph 75.d or 75.e must also:

a. Annually resubmit the documents described in Paragraph 78.b within 90 days after the close of the affected Respondent's or guarantor's fiscal year;

b. Notify EPA within 30 days after the affected Respondent or guarantor determines that it no longer satisfies the relevant financial test criteria and requirements set forth in this Section; and

c. Provide to EPA, within 30 days of EPA's request, reports of the financial condition of the affected Respondent or guarantor in addition to those specified in Paragraph 78.b; EPA may make such a request at any time based on a belief that the affected Respondent or guarantor may no longer meet the financial test requirements of this Section.

80. Respondents shall diligently monitor the adequacy of the financial assurance. If any Respondent becomes aware of any information indicating that the financial assurance provided under this Section is inadequate or otherwise no longer satisfies the requirements of this Section, such Respondent shall notify EPA of such information within 30 days. If EPA determines that the financial assurance provided under this Section is inadequate or otherwise no longer satisfies the requirements of this Section, EPA will notify the affected Respondent of such determination. Respondents shall, within 30 days after notifying EPA or receiving notice from EPA under this Paragraph, secure and submit to EPA for approval a proposal for a revised or alternative financial assurance mechanism that satisfies the requirements of this Section. Respondents shall follow the procedures of Paragraph 82 in seeking approval of, and submitting documentation for, the revised or alternative financial assurance mechanism. Respondents' inability to secure financial assurance in accordance with this Section does not excuse performance of any other obligation under this Order.

**[NOTE: Case teams should make sure that the "trigger" regarding EPA's ability to direct the deposit of funds into a standby trust and/or demand work under the financial assurance mechanism is consistent with the trigger in the following paragraph, e.g., if the Order allows EPA to direct a financial assurance provider to deposit funds into a standby trust in the event of either a Performance Failure Notice that is not remedied by a Respondent within the allotted cure period or a Respondent's failure to provide alternative financial assurance 30 days prior to an impending mechanism cancellation, the mechanism should contain equivalent language.]**

#### 81. Access to Financial Assurance

a. If EPA determines that Respondents (1) have ceased implementation of any portion of the Work, (2) are seriously or repeatedly deficient or late in their performance of the Work, or (3) are implementing the Work in a manner that may cause an endangerment to human health or the environment, EPA may issue a written notice ("Performance Failure Notice") to both Respondents and the financial assurance provider regarding the affected Respondents' failure to perform. Any Performance Failure Notice issued by EPA will specify the grounds upon which such notice was issued and will provide Respondents a period of 10 days within which to remedy the circumstances giving rise to EPA's issuance of such notice. If, after expiration of the 10-day period specified in this Paragraph, Respondents have not remedied to EPA's satisfaction the circumstances giving rise to EPA's issuance of the relevant Performance Failure Notice, then, in accordance with any applicable financial assurance mechanism, EPA may at any time thereafter direct the financial assurance provider to immediately: (i) deposit any

funds assured pursuant to this Section into the standby trust fund; or (ii) arrange for performance of the Work in accordance with this Order.

b. If EPA is notified by the provider of a financial assurance mechanism that it intends to cancel the mechanism, and the affected Respondent fails to provide an alternative financial assurance mechanism in accordance with this Section at least 30 days prior to the cancellation date, EPA may, prior to cancellation, direct the financial assurance provider to deposit any funds guaranteed under such mechanism into the standby trust fund for use consistent with this Section.

#### **82. Modification of Amount, Form, or Terms of Financial Assurance.**

Respondents may submit, on any anniversary of the Effective Date or following Respondents' request for, and EPA's approval of, another date, a request to reduce the amount, or change the form or terms, of the financial assurance mechanism. Any such request must be submitted to the EPA individual(s) referenced in Paragraph 77, and must include an estimate of the cost of the remaining Work, an explanation of the bases for the cost calculation, a description of the proposed changes, if any, to the form or terms of the financial assurance, and any newly proposed financial assurance documentation in accordance with the requirements of Paragraphs 75 and 76 (Standby Trust). EPA will notify Respondents of its decision to approve or disapprove a requested reduction or change. Respondents may reduce the amount or change the form or terms of the financial assurance mechanism only in accordance with EPA's approval. Within 30 days after receipt of EPA's approval of the requested modifications pursuant to this Paragraph, Respondents shall submit to the EPA individual(s) referenced in Paragraph 77 all executed and/or otherwise finalized documentation relating to the amended, reduced, or alternative financial assurance mechanism. Upon EPA's approval, the Estimated Cost of the Work shall be deemed to be the estimate of the cost of the remaining Work in the approved proposal.

#### **83. Release, Cancellation, or Discontinuation of Financial Assurance.**

Respondents may release, cancel, or discontinue any financial assurance provided under this Section only: (a) after receipt of documentation issued by EPA certifying completion of the Work; or (b) in accordance with EPA's written approval of such release, cancellation, or discontinuation.

### **XXV. MODIFICATION**

84. The EPA Project Coordinator may make modify any plan or schedule [or the SOW] in writing or by oral direction. Any oral modification will be memorialized in writing by EPA within \_\_\_\_ days, but shall have as its effective date the date of EPA's Project Coordinator's oral direction. Any other requirements of this Order may be modified in writing by signature of the [insert title of designated signatory or designee of EPA Region \_\_\_\_].

85. If Respondents seek permission to deviate from any approved Work Plan or schedule [or the SOW], Respondents' Project Coordinator shall submit a written request to EPA for approval outlining the proposed modification and its basis. Respondents may not proceed with the requested deviation until receiving approval from the EPA Project Coordinator pursuant to Paragraph 84.

86. No informal advice, guidance, suggestion, or comment by EPA's Project Coordinator or other EPA representatives regarding any deliverables submitted by Respondents shall relieve Respondents of their obligation to obtain any formal approval required by this Order, or to comply with all requirements of this Order, unless it is formally modified.

## **XXVI. DELAY IN PERFORMANCE**

87. Respondents shall notify EPA of any delay or anticipated delay in performing any requirement of this Order. Such notification shall be made by telephone and email to the EPA Project Coordinator within 48 hours after Respondents first knew or should have known that a delay might occur. Respondents shall adopt all reasonable measures to avoid or minimize any such delay. Within 7 days after notifying EPA by telephone and email, Respondents shall provide to EPA written notification fully describing the nature of the delay, the anticipated duration of the delay, any justification for the delay, all actions taken or to be taken to prevent or minimize the delay or the effect of the delay, a schedule for implementation of any measures to be taken to mitigate the effect of the delay, and any reason why Respondents should not be held strictly accountable for failing to comply with any relevant requirements of this Order. Increased costs or expenses associated with implementation of the activities called for in this Order is not a justification for any delay in performance.

88. Any delay in performance of this Order that, in EPA's judgment, is not properly justified by Respondents under the terms of Paragraph 87 shall be considered a violation of this Order. Any delay in performance of this Order shall not affect Respondents' obligations to fully perform all obligations under the terms and conditions of this Order.

## **XXVII. NOTICE OF COMPLETION OF WORK**

89. When EPA determines that all Work has been fully performed in accordance with this Order, with the exception of any continuing obligations required by this Order, including **[insert list of such obligations, e.g., [if applicable: land, water, or other resource use restrictions], Payment of Response Costs, and Record Retention,]** EPA will provide written notice to Respondents. If EPA determines that any Work has not been completed in accordance with this Order, EPA will notify Respondents, provide a list of the deficiencies, and require that Respondents modify the RI/FS Work Plan, if appropriate, in order to correct such deficiencies within \_\_\_\_ days after receipt of the EPA notice. The modified RI/FS Work Plan shall include a schedule for correcting such deficiencies. Within \_\_\_\_ days after receipt of written approval of the modified RI/FS Work Plan, Respondents shall implement the modified and approved RI/FS Work Plan and shall submit a modified draft RI Report and/or FS Report in accordance with the EPA notice. Failure by Respondents to implement the approved modified RI/FS Work Plan shall be a violation of this Order.

## **XXVIII. ADMINISTRATIVE RECORD**

90. EPA has established an administrative record that contains the documents that form the basis for the issuance of this Order. It is available for review by appointment on weekdays between the hours of \_\_\_\_ and \_\_\_\_ at the EPA offices in **[insert Region-specific logistical information for review of the record]**. To review the administrative record, please contact **[insert name of Regional contact person]** at **[insert contact phone number and email]**

**address]** to make an appointment. **[Optional:** A copy of the administrative record is also available for viewing at **[insert address where copy of the record is located]]**. **[Optional:** An index of the administrative record is attached.]

91. EPA will determine the contents of the administrative record file for selection of the remedial action. Respondents shall submit to EPA documents developed during the course of the RI/FS upon which selection of the remedial action may be based. Upon request of EPA, Respondents shall provide copies of plans, task memoranda for further action, quality assurance memoranda and audits, raw data, field notes, laboratory analytical reports, and other reports. Upon request of EPA, Respondents shall additionally submit any previous studies conducted under state, local, or other federal authorities that may relate to selection of the remedial action, and all communications between Respondents and state, local, or other federal authorities concerning selection of the remedial action.

#### **XXIX. SEVERABILITY**

92. If a court issues an order that invalidates any provision of this Order or finds that Respondents have sufficient cause not to comply with one or more provisions of this Order, Respondents shall remain bound to comply with all provisions of this Order not invalidated or determined to be subject to a sufficient cause defense by the court's order.

It is so ORDERED.

BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
Name  
Regional Administrator (or designee/delegatee)  
Region (Number)  
U.S. Environmental Protection Agency

EFFECTIVE DATE: \_\_\_\_\_

## Instructions Regarding Automated Features

FEATURE	INSTRUCTIONS
<b>INSERTING TEXT COPIED FROM A DIFFERENT DOCUMENT</b>	Text copied from a different document will usually have embedded formatting codes. Pasting the text into your document will cause the formatting codes to be inserted as well, which will create unpredictable and frustrating formatting and numbering results. <b>Therefore, ALWAYS use the “Paste Special” function to insert text copied from another document.</b> Press Ctrl-Alt-V; in the pop-up menu, click “Unformatted Text” and OK. (You can also click the Home tab, Paste, Paste Special, Unformatted Text and OK.)
<b>INSERTING A NEW PARAGRAPH</b>	Click at the end of the ¶ immediately preceding the place where you wish to add the new <b>paragraph</b> , and press Enter. To change the new ¶'s outline level use (under the Home tab) the styles menu. For example, to change ¶12.b into ¶12.a(1), click in that ¶ and then (using the Home tab) click the "LVL 3" style. To change ¶13.a into ¶14, click in that ¶ and then (using the Home tab) click the “LVL 1” Style. Note that in consent decree models, the letters denoting each background paragraph must be manually updated.
<b>ADDING AN UPDATEABLE SECTION OR PARAGRAPH CROSS-REFERENCE</b>	(a) Click where you wish to insert a cross-reference; (b) Click the “References” tab, and, in the “Captions” box, click “Cross-reference;” (c) In the pop-up menu that appears, make sure the “Reference type” field contains “Numbered item” and the “Insert reference to” field contains “Paragraph Number (full context);” (d) In the “For which numbered item” field” select the numbered item (section, paragraph. or subparagraph) you wish to cross-reference, and click Insert.
<b>UPDATING THE CROSS-REFERENCES</b>	Press Ctrl-A (to select entire document); right click; in the pop-up menu, click “Update Field;” click OK. Note: If a numbered paragraph that has been cross-referenced elsewhere in the document is deleted, remove the obsolete paragraph cross-reference. Otherwise, when you update the cross-references, the following message will appear: “Error! Reference source not found.”
<b>UPDATING THE TABLE OF CONTENTS</b>	Right-click in the TOC, and in the pop-up menu, left-click “Update Field.” Or click in the TOC, press F9, click Update Entire Table and OK. If you have just added a new section heading, click Update entire table before pressing Enter.
<b>INSERTING A NEW SECTION HEADING</b>	Click in the text of the new heading and assign the “SECTION” paragraph style to the text by clicking the “Home” tab, and in Styles box, clicking the “SECTION” style button.) That will add the section number, change the numbering of later sections, and ensure that the new section will be referenced in the table of contents.
<b>CHANGING THE FONT</b>	Press Ctrl-A (to select entire document); right click; in the pop-up menu, click “Font;” in the “font” field, select a new font; click OK.